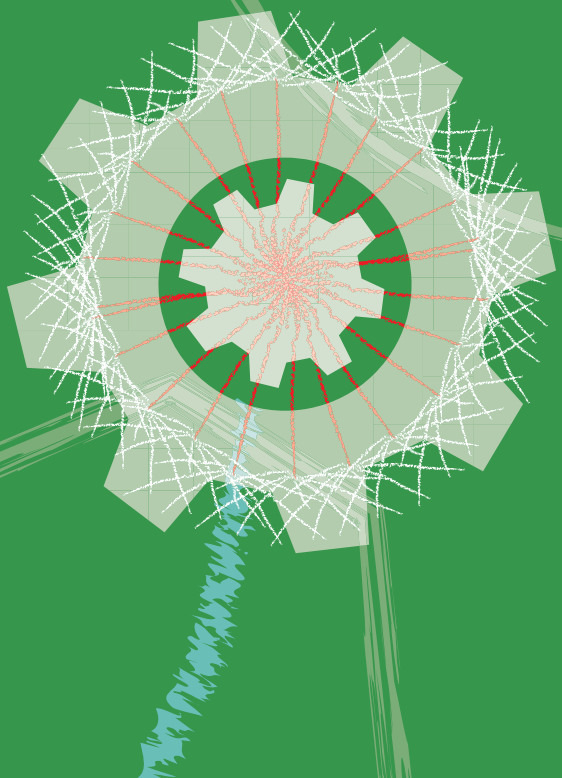
GEM GENDER EVALUATION METHODOLOGY
FOR INTERNET AND ICTS
A LEARNING TOOL FOR CHANGE AND EMPOWERMENT

Gender Evaluation *for* Rural ICT for Development



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Gender Evaluation for Rural ICT for Development

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Angela M. Kuga Thas

Association for Progressive Communications
APC Women's Networking Support Programme
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info@apcwomen.org, www.apcwomen.org

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GEM II Project Team (Nov 2006 to Jul 2010): Chat Garcia Ramilo
Angela M. Kuga Thas
Cheekay Cinco (Feb 2007 to Mar 2008)
Lenka Simerska (Mar 2008 to Mar 2010)
Dafne Sabanes Plou

Editing: Kris Kotarski
Proofreading: Alvaro Queiruga, Julian Hopkins
Cover design: Edwin Kho
Layout design: Mosaic Street Sdn. Bhd.

APC	Association for Progressive Communications
APC WNSP	APC Women's Networking Support Programme
APCTT	UN Asia-Pacific Centre for Technology Transfer
BDS	Business Development Service (Nigeria)
CEPES	Centro Peruano de Estudios Sociales (Peru)
CLC	Computer Literacy Centre
CLP	Computer Literacy Programme (Bangladesh)
CRULP	Center for Research in Urdu Language Processing (Pakistan)
DCC	Digital Community Centre
D.Net	Development Research Network (Bangladesh)
ENRD	E-Network Research and Development (Nepal)
FGD	Focus Group Discussion
FOSS	Free and Open Source Software
GEM	Gender Evaluation Methodology
GenARDIS	Gender, Agriculture and Rural Development in the Information Society
GRACE	Gender Research in Africa into ICTs for Empowerment
GSS	Gender Score Sheet
ICT	Information and Communication Technology
ICTD	Information and Communication Technologies for Development
IDRC	International Development Research Centre (Canada)
NGO	Non-Governmental Organisation
OMg	Gendered Outcome Mapping
PAIC	Public Access Internet Centre
PAN L10n	PAN Localisation
PSTN	Public Switched Telephone Network
SC	Scheduled Caste (India)
SITA	Studies in Information Technology Applications
SMC	School Management Committee
SMS	Short Message Service
SSC	Secondary School Certificate (Bangladesh)
ST	Scheduled Tribe (India)
SWOT	Strengths, Weaknesses, Opportunities and Threats
UAO	Universidad Autónoma de Occidente (Colombia)
VAB-NJ	Volunteers Association for Bangladesh, New Jersey (United States)
VoIP	Voice over Internet Protocol
WISP	Wireless Internet Services

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This guide could not have been written without our project partners around the world who graciously shared their experiences and knowledge. They are now part of the GEM practitioners' community, with experiences as facilitators, workshop organisers, popular communicators, community trainers, community outreach workers, organisational managers, computer class teachers, and more.[1] Our partners agreed to the research, which adapted the application of the Association for Progressive Communications' (APC) *Gender Evaluation Methodology for Internet and ICTs* (GEM) within their specific contexts and cultures. The result is this guide, rich with examples of how to apply GEM at each step.

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[1] For more information, see www.genderevaluation.net/mygem.

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The APC WNSP Team

Association for Progressive Communications

Internet and ICTs for social justice and sustainable development

Founded in 1990, the Association for Progressive Communications (APC) is a non-profit organisation that aims to improve people's lives through easy, affordable and equal access to information and communication technologies (ICTs) like the internet, email and mobile phones.

We help people gain access to the internet where there is none or it is unaffordable, we help grassroots groups use technology to develop their communities and to further their rights, and we work to make certain that government policies related to information and communication serve the best interests of the general population, especially people living in developing countries.

APC is both a network and an organisation. APC members are groups working in their own countries to advance the same mission as APC. Eighty percent of our members are from developing countries. APC's value comes from the local perspectives and contact with grassroots organisations that we gain from our members and the fact that we operate as a truly virtual, international organisation. What makes APC unusual is that we work on two separate, yet interrelated levels: with governments in shaping policy and hands-on with the technology and the people who use it.

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info@apc.org

APC Women's Networking Support Programme

The Association for Progressive Communications Women's Networking Support Programme (APC WNSP) is both a programme within APC and a network of women throughout the world committed to using technology for women's empowerment and equality. Founded in 1993, more than 175 women from 35 countries—librarians, programmers, journalists, trainers, designers, academics, researchers, communicators—from around the world are part of our network.

The Gender Evaluation Methodology (GEM) was developed in APC within the APC's women's programme after we began investigating the impact of our work in 2000. We asked: What changes are empowering women? How are these changes being measured? What role do ICTs play in these changes? How do these changes shift gender relations between women and men?

At the time, there were no gender evaluation models or tools that looked specifically at the use of ICTs or technology. In 2001, we began developing GEM with ICT for development practitioners in 25 countries from Latin America, Asia, Africa and Central and Eastern Europe. The GEM manual was published in 2005. This new suite of publications for people who want to use GEM was published in 2011. Although GEM was initially developed for the internet and ICTs, experience demonstrates that GEM can also be used by the development sector in general to improve gender relations.

www.apcwomen.org
www.genderevaluation.net
info@apcwomen.org

Preface

It is very common to see or hear about information and communication technology (ICT) being used in development projects in rural areas all around the world. These rural ICT for development (ICTD) projects are often located in very different contexts from each other and usually face multiple and complex challenges. The rural context brings with it a number of elements that can be similar and also different to urban-based development projects. There are several elements that are most often addressed in ICTD projects. The most common are: geography and topology which impact on infrastructure and access to ICTs; literacy, education and language which impact on the capacity to use ICTs; and, the level of income and quality of economic activities which impact on access to and appropriation of these technologies.

Less commonly addressed in ICTD projects are gender relations and power dynamics in rural communities that complicate how ICTs are controlled and how access to these technologies is distributed. Many ICTD projects in rural areas often touch the lives of communities in varying ways. Residents can have access to new information, new knowledge and new skills. Or they can find new employment opportunities and earn additional income. Some play new roles that in turn affect social relations within the community. In the same way, ICTD projects impact on gender roles and relations in communities and the way they are appropriated can either lessen or further perpetuate gender inequalities. Learning about how ICTD projects can contribute to changing unequal gender roles and oppressive gender relations towards more empowering relationships within rural communities, was our motivation in evaluating three ICTD projects implemented in rural communities.

In 2007, APC WNSP began to conduct an adaptation research project to make its *Gender Evaluation Methodology for Internet and ICTs* (GEM) more user-friendly for different sectors and communities. Working with three GEM practitioners, we adapted GEM for rural ICTD projects over the next two years to see how useful GEM can be for groups who work directly with communities in applying ICTs to bring about development in rural locations. All three GEM practitioners are based in different countries. Two of them evaluated their own rural ICTD projects while the third used GEM to evaluate a state government programme. The experiences of the three GEM practitioners speak of the challenges in "incorporating learning for change" and in bringing about gender equality within the contexts of their work.

We trust that this guide can help you use GEM to evaluate rural ICTD projects or, at the very least, to understand how gender inequality can and does impact the effectiveness of the design and implementation of such projects. We hope that this guide makes it easier for each of us to commit to take up the challenge of ensuring that gender considerations become more commonly addressed in all ICTD projects.

Chat Garcia Ramilo
Manager
APC WNSP

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Although the potential of information and communication technologies (ICTs) to promote positive social change is increasingly recognised all over the world including in countries where infrastructure is still very poor, the understanding of gender equality concerns in ICT for development (ICTD) needs strengthening. While many ICTD practitioners and policy makers are committed to addressing gender issues and concerns which manifested themselves within their projects and programmes, most do not know how to do so. Meanwhile, some ICTD practitioners and policy makers need to be convinced of the need to address gender and ICT issues, and others still believe that ICTs are gender neutral. It was within this context that the Association for Progressive Communications (APC) developed the *Gender Evaluation Methodology for Internet and ICTs* (GEM).

GEM was developed by APC within the Women's Networking Support Programme (APC WNSP) after APC WNSP itself began investigating the impact of its work in 2000. At that time, there was a strong and mutual need among members to build a collective understanding of the real impact of almost ten years of women's networking and advocacy on gender and ICT issues, and APC WNSP and its members had the following questions:

- What changes are empowering women?
- How are these changes being measured?
- What role do ICTs play in these changes?
- How do these changes shift gender relations between women and men?

At the time, there were neither gender evaluation models nor gender tools for project/programme planning and evaluation that had a strong component in relation to the use of ICTs or technology in general, so there was a gap in the information and communication sector. In 2001, APC WNSP began developing GEM with ICTD practitioners in 25 countries from Latin America, Asia, Africa and Central and Eastern Europe. The GEM manual was published in 2005 and is the result of the collection, evaluation and deeper analyses of experiences from 32 projects by ICTD practitioners.

GEM provides a systematic method to evaluate whether ICTs are improving women's lives and gender-power relations. Since GEM's development, APC has organised over 30 GEM workshops with over 300 participants, and GEM has been presented at over 20 events held around the world.[2] Since GEM's development, ICTD practitioners have begun to realise that the introduction of ICTs

[2] Visit www.genderevaluation.net for more information.

alone is insufficient to bring about positive social change. While there is no doubt that ICTs have the potential to support change including women's empowerment, this has to be consciously planned for by integrating a critical reflection process in the programming and evaluation for these changes to happen.

GEM is one way for ICTD practitioners and policy makers to make certain that a development intervention remains adaptive and responsive to dynamic situational contexts that are constantly influenced by political, economic, social and technological factors, as well as natural calamities. GEM users appreciate that there is no perfect recipe for effective development, but only a system of mechanisms that will allow for periodic feedback, reflection and action. GEM raises the consciousness of its users by challenging them to look beyond static data collection models that force the community they are supposed to serve to fit into a prescriptive model. GEM users know that they should always be ready to go back to their intervention model and to redesign, implement and continuously monitor their undertakings to effect the change they want to bring about in their communities.

This guide can be both a stand-alone guide and a complementary guide to be used with other planning, monitoring and evaluation (PME) methodologies. Ideally, this guide should be used along with *APC's Gender Evaluation Methodology* (GEM) as references are made to the principles and frameworks adopted within GEM.

The main content of the guide is divided into five sections:

- Introduction
- Rural ICTD projects for social change
- Before you begin a gender evaluation
- Using the gender evaluation methodology in rural ICTD projects
- Ongoing challenges.

Section 1 provides the rationale for the development of the guide. It presents some basic information on what is meant by "rural ICTD project" and what typical rural ICTD projects are. It explains why this guide is necessary for those who would like to conduct a gender evaluation of their rural ICTD initiatives.

Section 2 discusses some examples of gender and ICT issues in rural ICTD projects. It also presents an extensive list of categories for key issue areas that can be targeted for social change by rural ICTD projects and the corresponding gender and ICT issues that a rural ICTD project could address. It examines how these key issue areas align within the core framework of GEM and Longwe's Women's Empowerment Framework.[3]

Section 3 describes five key considerations that potential or existing GEM practitioners have to examine if the application of GEM is to be effective for the user, the project and/or the organisation. The conduct of an evaluation with a gender perspective means that practitioners should be ready to take the necessary steps and commit the required resources to address gender inequality concerns and issues that will be made visible by the evaluation findings. Therefore, prior to conducting a gender evaluation, it is important to consider:

- Organisational values
- Stakeholdership
- Capacities of personnel
- Understanding of gender
- Budgetary implications.

Section 4 introduces the seven steps of GEM, with illustrative examples and a reflective discussion of the processes as shared by the project partners in applying GEM. The seven GEM steps are organised into three phases of the methodology:[4]

[3] For more information see pages 33–38 of the GEM manual.
[4] For a more detailed discussion of these steps and phases see page 68 of the GEM manual.

The Gender Evaluation Methodology

Phase 1: Integrating gender analysis
- Step 1: Defining intended use and intended users
- Step 2: Identifying gender and ICT issues
- Step 3: Finalising evaluation questions
- Step 4: Setting gender and ICT indicators

Note: This phase lays down the groundwork for planning and implementing a gender evaluation of an ICT-based initiative by arriving at an understanding of basic concepts of gender and ICTs. It sets the scope, purpose and limits of the evaluation.

Phase 2: Gathering information using gender and ICT indicators
- Step 5: Selecting data-gathering methods/tools
- Step 6: Analysing data from a gender perspective

Note: This phase focuses on various data-gathering methods and on analysing data from a gender perspective.

Phase 3: Putting evaluation results to work
- Step 7: Incorporating learning into the work

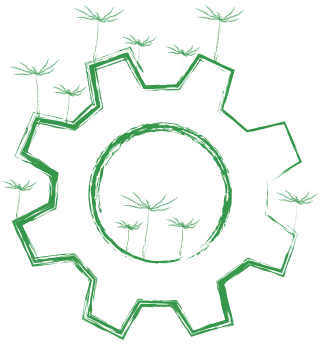
Note: This phase focuses on how the lessons learned from the evaluation process can influence change within your organisation, your community and the wider gender and ICT movement.

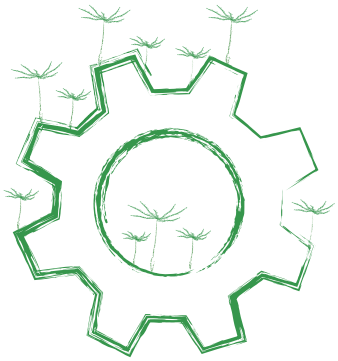
You will find more information on each step within the GEM manual.

Section 4 provides insights on the difficulties faced by those applying GEM for each step of the methodology. It also illustrates the thought processes, workable solutions (if any) and whether GEM complemented the development and design of new or existing data gathering tools. All of these “lessons learnt” are based on real life experiences of those who had applied GEM to rural ICTD projects. In using this section, practitioners can refer only to those GEM steps that are proving to be difficult, or they can read the whole section to understand the possible challenges that practitioners face while undertaking the evaluation on the ground. The insights shared in this section can also be used to help improve the planning for the conduct of the evaluation.

Section 5 shares how critical it is to design intervention strategies that address the root causes of gender inequality and how difficult it can be to continuously challenge entrenched gender inequalities. Addressing the symptoms and only what is visible may one day see the good that was brought about through the many rural ICTD projects easily obliterated. The section presents the sad reality that a GEM practitioner can face.

SECTION 1:
INTRODUCTION





SECTION 1: INTRODUCTION

1.1 Why develop this guide?

In 2007, APC WNSP began researching how to make GEM more user-friendly for different sectors and communities. One of these sectors was the rural information and communication technology for development (ICTD) sector. The adaptation research was undertaken because even though GEM had been used by a number of organisations undertaking rural ICTD projects, the context of each project differed since what is rural is largely dependent on the characteristics of each country. There was therefore a need to document the experiences more systematically and in a manner that would be helpful for ICTD practitioners who are interested in conducting a gender evaluation and who work in similar rural contexts. Hopefully, these illustrative examples may give some useful insights to ICTD practitioners who work in very different rural contexts.

GEM is a methodology that, when applied, can indirectly challenge the rigidity and preconceptions of the donor agency for the project because GEM encourages "learning for change". This means that the project staff team must have the flexibility to respond or redesign the project if monitoring data or information collected through quarterly or mid-term evaluations demand this. Change may also lead to discomfort among project staff tasked with making these changes because such changes may mean having to work in a different manner or adding more workload because new mechanisms, etc. may have to be put in place.

One of the root causes for gender inequality is the gender gap that is often very visible in rural ICTD projects (difference in numbers or percentages between the participation of women and men or girls and boys). However, because it is the only visible root cause among the main root causes for gender inequality, it

is often the only root cause that rural ICTD projects try to address when they include "gender equality" as one of their project's objectives. Addressing gender in any ICT project is a challenge because the non-visible root causes are closely linked with patriarchal control, patriarchal belief and coercion of women. Rural ICTD projects are more often than not located in contexts that have these root causes already entrenched within the said locality and community. Infrastructure and access are particularly significant issues in rural settings and this sometimes makes it difficult to examine other aspects and to adopt a more holistic approach to development that emphasises human development rather than the supply of technology and related products and services.

To bring about change, it is important to become aware of the aspects that are not so visible such as the attitudes, perceptions, beliefs and behaviours in relation to change. These aspects can adversely affect "learning for change", a key principle behind GEM, a utilisation-focused evaluation methodology that emphasises the use of evaluation results to strengthen the "learning for change" culture within a project, team or organisation. Evaluation findings can illuminate the need to put in place certain changes but which may require further persuasion of the whole project team and organisation within which these changes are needed. The challenge in incorporating these changes and integrating and putting into place a "learning for change" culture points to the necessity of a document that illustrates how different rural ICTD projects implemented GEM at each step, and that shows how "learning for change" can occur at each phase of the methodology. This means having to ask:

- How different are the experiences of groups who initiate, implement and evaluate their rural ICTD projects?
- To what extent will experiences differ given a different context?
- What could be different about the philosophies and values of the organisations that implement these rural ICTD projects in addressing gender issues and gender equality?
- How will this wider application of GEM within rural ICTD projects change the experience of using GEM—the actual conduct of a gender evaluation—and the use of the findings that result from that?

This guide reflects the collective learning of the GEM practitioners who took part in the adaptation research (also referred to as the GEM adaptors), and the wide range of gender evaluation experiences and knowledge in their work with rural ICTD projects. The guide also integrates important insights from the thematic adaptation background research paper entitled *Adaptation of GEM Tool for Rural ICT for Development Projects.*[5] This guide is designed to present and share these lessons so that GEM practitioners are able to apply GEM with ease when working in similar areas or facing similar challenges.

It is hoped that the guide will be used to obtain ideas of what is possible within existing resource constraints and to identify workable solutions to existing challenges. It is also hoped that the guide will serve as a resource for deeper thought and reflection on projects and evaluation practices and in embracing a "learning for change" culture. GEM emphasises "putting evaluation results to work" because it is a utilisation-focused evaluation methodology. The examples presented in this guide illustrate that in the GEM adaptors' experiences, this has meant both organisational and internal policy changes to address gender inequalities and to bring about a stronger learning culture within the organisation's systems and practices. It can also lead to using the evaluation findings to effect change in the national policy environment of the ICTD sector. This guide should therefore ideally be used with the GEM manual.[6] Though GEM was initially developed for the internet and ICTs, experience in this adaptation research demonstrates that GEM can also be used for other development sectors, such as education, health, etc.

[5] Ananya Raihan *Adaptation of GEM Tool for Rural ICT for Development Projects* (Bangladesh: October 2007). Available for download at: www.genderevaluation.net/gemworks.

[6] The GEM manual is available in Arabic, English, French, Portuguese and Spanish. Visit www.genderevaluation.net/gemworks to download the GEM manual.

To ensure continued learning and self-improvement in applying GEM, GEM practitioners are invited to participate in an online space, the GEM Practitioners Network (www.genderevaluation.net/mygem), where they will find more resources and have more opportunities to learn and share experiences in the use of GEM with people from different projects and regions of the world.

1.2 What is a rural ICTD project?

The definition of what is "rural" is largely dependent on the characteristics of the country concerned. For some, "rural" describes any area that is non-urban. For others, it may be an area with poor infrastructure, or an area that is sparsely populated or sparsely settled. In rural areas, people may live in villages or small-scale farms or in isolated houses. Rural areas can have an agricultural character, though there are rural areas that are characterised by an economy based on logging, mining, oil and gas exploration, or even tourism. Governmental services like law enforcement, schools, fire departments, hospitals or health clinics, and libraries may be distant, limited in scope or unavailable. Often, utilities like piped water, sewerage, street lighting and garbage collection may not be present. Public transport may be absent or very limited, and people may be using their own vehicles, walking or riding animals for transportation.

The different definitions of what is rural and what is not rural have an impact on how community issues of ownership, participation and decision-making are interpreted. The term "rural ICTD projects" is a very broad term on its own, if consideration is given not only to situational and cultural contexts, but also to project scale, outreach and availability of infrastructure, resources, public utilities and services. All of these aspects can and do impact on how and whether gender is considered in the conceptualisation, planning and implementation of rural ICTD projects and, certainly, the conduct of a gender evaluation.

ICTD is an increasingly popular, general term referring to the application of information and communication technologies (ICTs) within the field of socio-economic development. ICTs can be applied either in a direct sense, where their use may directly benefit a disadvantaged population in some manner, or in an indirect sense, where the ICTs assist aid organisations, non-governmental organisations or governments in improving socio-economic conditions.[7]

Rural ICTD is a set of ICT-based interventions in or for a specific geographical setting that is deemed a rural area. It can also be any application of development or research used in a rural context. A project can be called a rural ICTD project if it is meant for the rural populace as a whole, or for a specific community, or developed and implemented by a rural community. A rural ICTD project can therefore focus on a wide range of possibilities.

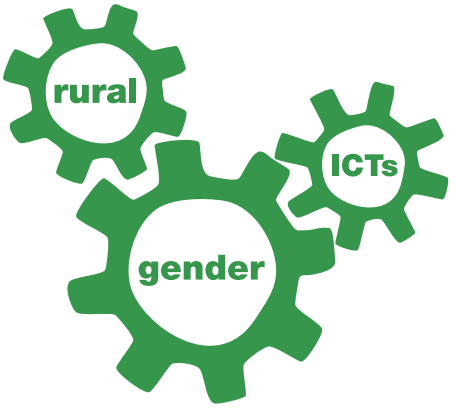
Types of rural ICTD projects can include:

- **Connectivity:** projects related to setting up internet connectivity, radio communications, and telecommunication [both mobile, fixed line and public switched telephone network (PSTN)] to be used by the rural community
- **Education and human capacity-building:** projects related to building the capacity of the rural community in using modern ICTs. This may help them in accessing those ICTs by themselves so as to access relevant livelihood information and knowledge; it can also support self-employment or wage employment, and promote their empowerment through the right to know. Projects on "e-learning" can also be included under this heading.

[7] Wikipedia *Information and Communication Technologies for Development*, accessed 1 February 2011 http://en.wikipedia.org/wiki/Information_and_Communication_Technologies_for_Development

- **Projects related to information and knowledge systems:** projects related to building and operationalisation of information and knowledge systems [for example: telecentres, Digital Community Centres (DCCs), Public Access Internet Centres (PAICs)] so that rural people can create and get access to content relevant to their livelihood. The information and knowledge system must facilitate the following for rural people:
    - Realise savings on livelihood costs
    - Increase income opportunities
    - Reduce or avoid risk of loss of income or assets resulting from potential loss or damage
    - Strengthen social empowerment through the exercise of rights.

  There are projects which are related to the preservation of indigenous practices and knowledge, culture and tradition with the help of ICTs. If projects help build information and knowledge systems by the rural community, they may fall under this category. Other examples are media projects, including radio projects which emphasise community participation and ownership or the active involvement of women in journalism and professional media.
- **Local e-government:** projects targeting empowerment of local government institutions by enabling them to offer e-government services to the rural community. Projects undertaken by local government institutions for creating government access points, enhancing transparency, and access to information on government operations also fall under this heading.
- **Sectoral development:** projects implemented in rural areas related to improvement of education, health-care, agricultural production and marketing, alternative income generation, legal services, entertainment services, etc. These projects may incude ICT-driven solutions to better deliver their services/goods.
- **Entrepreneurship development:** projects related to development of entrepreneurship by using ICTs. This may be ICT-entrepreneurship or entrepreneurship facilitated by ICTs. Microcredit related programmes and projects that use ICTs to improve efficiency and transparency may also fall under this heading.
- **Projects related to empowerment of rural community:** projects related to raising awareness of a particular rural community and to facilitating the claims and the exercise of rights by the marginalised and disadvantaged groups use various kinds of ICTs. Projects related to campaigns and social movements, which are related to ICTs and may have a gender dimension, can also be grouped here.
- **Rural market development:** projects facilitating access to markets for products of rural origin.
- **Policies impacting rural livelihood:** the policy initiatives of the government, private sector, civil society, NGOs, academia and research, which are concerned with life and livelihood of people and where ICTs are an integral component fall under this heading.



There are three factors that make rural ICTD projects quite different from each other: the rural development aspect; gender issues; and ICT considerations. In the conceptualisation of a rural ICTD project, these three key

[8] For more details, see: UNDP *Rural Telecentre Impact Assessments* (Geneva, Switzerland: UNDP, 2009) http://www.apdip.net/resources/access-infrastructure/connectivity1/link.2005-07-11.7590407625/view

components—rural, gender and ICTs—can vary in weight depending upon the project's context as well as how well-suited its design is to the context and purpose of the project. For example: in some rural ICTD projects, ICTs play the most prominent and crucial role because there was no infrastructure before the project was implemented. For other types of rural ICTD projects, the rural development aspect or gender issues could have more weight in determining or influencing the design of the project.

The critical interest that these projects generate as a way of facilitating the extension of social services to rural populations make it all the more necessary to ensure that these projects consider and actively address gender. Women in rural communities are generally the most disadvantaged when they are poor, and whether access to ICTs empowers or further disempowers women is a critical factor if gender inequality is to be decreased, and if the digital divide between women and men, between rural and urban and between rich and poor is to be effectively narrowed.[9]

A rural ICTD project can be designed and implemented by universities, governments, non-profit organisations, women's organisations, journalists/communications/media groups or community-based organisations.

1.3 When rural ICTD projects wear the gender lens

When organisations and project teams "wear the gender lens" they gain the ability to distinguish between different types of gender-related problems, categorising and defining them according to their level of severity to facilitate a better examination of the situation or context. The "gender lens" is a term used to describe the gender analytical skills that facilitate the ability of organisations and project teams to understand how gender influences the situational context; and how—like factors of class, ethnicity, cultural beliefs and practices, religious beliefs and practices, economic and political situations—gender can and does inform inequality and "power over" dynamics. "Wearing the gender lens" also means that the organisation or the project team is committed to addressing the negative consequences of gender discrimination.

What kind of change can be brought about when rural ICTD projects wear the gender lens? What can happen when rural ICTD projects apply GEM? Two stories illustrate how a gender evaluation of rural ICTD projects can unearth obstacles to gender equality.

Box 1: Cultural gender biases are the biggest barriers to Bangladeshi girls' access to ICTs

Bangladeshi schoolchildren, just like most children worldwide, want to get connected. In a country that is largely comprised of rural populations that survive on subsistence farming, internet access and computer skills are not necessarily always high on the priority list in schools and small communities. Yet poor Bangladeshis realise that being up to date with technology is an important part of pulling themselves out of poverty. In a country where 50% of the men but only 3% of the women can read, access to information and better facilitation of communication (especially via ICTs) can mean access to job opportunities or new farming techniques.

[9] Daniel Pimienta describes the digital divide as nothing other than the social divide in the digital world. See: Daniel Pimienta "Digital divide, social divide, paradigmatic divide" in *International Journal of Information Communication Technologies and Human Development* 1,1 (2009). Older version accessible at: funredes.org/mistica/english/cyberlibrary/thematic/Paradigmatic_Divide.pdf.

D.Net, a non-profit organisation that focuses on technology for economic development, saw the need for content in Bangla to cater to rural people's information needs. In an effort to help underprivileged rural youth build their computer skills, they developed a programme to teach them how to use computers—the Computer Literacy Programme (CLP). By June 2009, D.Net was operating 107 computer literacy centres in 39 districts across the country and a total of 18,556 students had successfully completed the CLP course. To improve the training programme, D.Net wanted to learn more about what types of information the students, their parents and teachers needed, and how they viewed technology. Using the APC's Gender Evaluation Methodology to conduct the study, they uncovered some views about technology that surprised them and which they believe would not have surfaced if the study had not included a gender focus.

Against cultural norms—access for girls is a challenge

The GEM study found that cultural factors play a bigger role than the lack of money or resources in whether or not a girl attended training sessions. Co-founder of D.Net and CLP lead, Mahmud Hasan, explains that girls are often denied the chance to even participate in any sort of computer training because it is considered socially inappropriate.

"Computer classes in schools are extra-curricular and usually held before or after regular classes. The biggest problem is that girls have to stay after school when it is dark out. So despite their interest, they are not allowed to attend the course," he says.

But, girls are not left in the dark for this reason alone. It seems the entire community often favours computer access for boys over girls. Mahmud explains that not only do fathers encourage their sons over their daughters, but teachers also generally push for boys to access the internet over girls. This mentality can be found throughout the community at large.

"If a boy is attending a computer course, community members encourage him to continue, but opinions are mixed where girls are concerned. Elders and community members ask her why she wants to complicate her life, especially when she already spends so much time at school and has so many chores at home."

Even D.Net's sponsors seem to favour boys. One of D.Net's core fundraising strategies is to seek funds from Bangladeshis living overseas. These migrants generally sponsor a school in the villages where they were born and brought up.

"We noticed that few girls' schools got sponsored, unless the particular donor was female," says Mahmud.

The gender evaluation of D.Net's CLP encouraged Mahmud's team to reconsider their fundraising policy, which asked sponsors to select the schools they wished to support. Instead, backed by the evaluation findings, D.Net encouraged their sponsors to give D.Net the flexibility to choose the schools most in need. As a consequence, D.Net is now able to fund boys and girls schools equally and, of the almost 20,000 students who had completed their training in June 2009, 52% were girls.

Centring the user's perspective on the relevance of ICTs

The GEM study revealed that girls saw the utility of ICTs for domestic income generation

through handicrafts and textiles by accessing designs from CDs and the internet—something none of the boys mentioned.

"When asked about the benefits to taking a computer class, responses from boys and girls were different," says Mahmud. "Boys referred to getting jobs, doing computer business, setting up cyber cafés or telecentres whereas girls saw how to apply computers for creating new income generation opportunities from the home. The girls interviewed told us that they could get various types of designs from the computer, which they used in the production of handicrafts, like carpet-making."

GEM unearths the invisible

As a methodology developed to identify gender gaps in technology projects, GEM helps to measure the not-so-tangible qualitative issues related to cultural beliefs, the subtle (and not so subtle) gender differences and other factors that may not be visible or concrete but can have a significant effect on the success or failure of a project.

Initially somewhat sceptical about the value of using a gender-focused methodology, D.Net has now come to realise that technology is socially constructed, meaning that culture and social norms have a direct impact on gender roles and therefore affect to what extent it is socially acceptable and appropriate for boys and girls to access ICTs (for instance, in Bangladesh this can be expressed through the willingness of a parent to send their female children as opposed to their male children to computer classes). While the D.Net staff realise that a rural ICT for development project cannot automatically address gender gaps related to access, GEM gives them the tools they need to consciously plan for and ensure that women and girls are given equal and accessible opportunities throughout each project's life-cycle.

Applying GEM's "gender lens" (a gender analytical perspective) during planning, data collection and analysis, D.Net was able to build breakthrough opportunities for girls into the project in direct consultation with mothers, female teachers and the girls themselves. D.Net intends to expand the CLP project to 1,000 schools by the year 2011 and will place special emphasis on girls' schools.

D.Net: Leading the GEM way in Bangladesh

Convinced that to change social conditions in Bangladesh women's and girls' unequal status and opportunities needed to be addressed, D.Net organised the first ever national GEM training seminar with ten participating organisations including development groups such as Action Aid Bangladesh in February 2010.

"The objective was to introduce GEM to development practitioners in Bangladesh," says Mahmud. "The enthusiasm among participants showed us the possibility of engaging them on a sustained basis."

He explains that it was encouraging to see that people who underwent training felt committed to incorporating GEM into their own monitoring and evaluation strategies and wanted more in-depth training as well as additional support to introduce the methodology to their partners.

"This will create an opportunity to bring gender equality to tens and hopefully even hundreds of initiatives in Bangladesh."

What can we learn from D.Net's gender evaluation experience?

The experience of the gender evaluation of D.Net's CLP in Bangladesh (described in Box 1) shows that "learning for change" took place at the decision-making level, and the findings were used to influence the policy on which schools would benefit from the CLP. Intervention strategies that D.Net used to address cultural barriers emphasised direct consultations with mothers, female teachers and the female students themselves. Such intervention strategies meant that D.Net could still set the same benchmarks of achievement for girls as they do for boys without expecting girls to underachieve, even though girls face greater social and cultural barriers in learning and accessing ICTs.

Box 2: Ensuring women's equal political participation in India is not just about numbers

In India's rural e-governance initiative, 33% of local government seats are reserved for women. Rural village heads of Chhattisgarh State—one of India's poorest—can now participate in the public process and in theory remotely communicate the needs of their villages through the use of a low-cost computer that does not require computer literacy. But women are not taking the active roles that were expected. Using GEM, APC's gender evaluation methodology, Dr Anupama Saxena and her team are finding out why winning an electoral seat does not necessarily guarantee that your voice is heard within the governance system if you are a woman.

Rural e-governance in India: For whom?

In India, a highly rural country, Simputers, a type of low-cost, portable alternative to personal computers that require limited computer literacy, have been introduced to give a voice to the marginalised through their locally elected leaders. In 1993, the *Panchayati Raj* (village self-government) system was introduced as a tool to improve rural communities. Described as revolutionary, one of the key features was that 33% of elected seats were reserved for women, a quota that has recently been increased to 50% in the state of Chhattisgarh, one of the poorest states in the whole of India. It is there that GEM evaluator Dr Anupama Saxena of Guru Ghasidas University conducted her study. However, her findings show that even with women's presence in local governance officially guaranteed, female *sarpanchas* (democratically-elected village heads) have not been able to participate on an equal footing with men in rural governance.

Representation alone does not mean participation

When ICTs were introduced in 2005 in selected village *panchayats*, everyone expected the entire rural governance process to change with *sarpanchas*—both male and female—as the main beneficiaries. However, while female *sarpanchas* are apparently happy, enthusiastic and optimistic about using the technology, so far there have been no visible or tangible changes in their participation. The GEM study helped uncover why numerous technical problems related to the Simputers and ingrained inequalities meant that even designated female representatives remained voiceless, something that an evaluation that did not focus on gender-related inequalities may not have unveiled.

The unequal participation of female *sarpanchas* in rural e-governance is the result of prevailing social cultural discrimination of various forms against women.

Differences between male Simputer use and female use are substantial: one in three males who were given a Simputer transferred information to and from it. Of the women, less than one in a hundred used it (0.7%) to transfer data. So while supposedly 33% of all local government heads are women, they are not actively participating in the process, and using GEM helped to uncover why.

A lack of education, reproductive and productive roles, a lack of financial independence and deeply rooted cultural and religious taboos make it difficult for women to be heard in traditionally male-dominated spaces like politics. The negligible presence of female *sarpanchas* in rural governance is obvious.

"One of the *sarpancha*'s husbands actually denied us access to his wife," Dr Saxena recounts. "He repeatedly told us over the phone that there was no need to meet his wife since she just stayed at home, and that she lived far away from the *panchayata* she was representing, and that she never visited it. Instead, it was he who performed all the *sarpancha* duties."

Such stories were common in different variations.

"When we asked who the village *sarpancha* was, in most of the cases it was the name of the husband that was told to us and only after asking a second time and insisting on the actual name of the *sarpancha*, the villagers would tell us about the women *sarpancha*. The situation over the phone was similar—the husbands often identified themselves as the *sarpancha* and insisted that the information should pass through them as their wives 'did not know anything'. The few female *sarpancha*s who did take—and were able to take—their role seriously, were not taken seriously in official meetings."

Simputer training for only a day

Just one in ten female *sarpanchas* attended Simputer training independently. The other 90% were accompanied by either a male relative or a *sachiv* (secretary of the village government). This is because in rural India, women are not encouraged to travel alone in public.

The trainers were also male, and the women interviewed said they did not feel at ease approaching them with questions. This was not the case for male *sarpanchas*, because many men had already been exposed to new technologies such as mobile phones or computers. Men can also learn with fellow men through informal circles, whereas women do not have any opportunities to discuss technology outside of the one-day training, which many female *sarpanchas* found insufficient. In fact, 53% of female *sarpanchas* told Dr Saxena that they had had problems with the training for a variety of reasons including travel difficulties, language, food while away, as well as a lack of interest. It is difficult to find something interesting if you do not understand it, and given the low levels of English and Hindi literacy, many women simply did not understand the content and especially could not perform *sarpancha* tasks in these languages.

Women face more illiteracy and linguistic challenges
Results from the survey reveal important gender differences, which made Simputers a less-than-ideal tool for women. The Simputer uses many English words. Only 29% of the female *sarpanchas* have a working knowledge of English versus 66% of the men. The working language of Simputers is Hindi and 83% of men were fluent in Hindi compared to 70% of the women. Only a very small percentage of male *sarpanchas* are illiterate whereas one in ten female *sarpanchas* are illiterate.

Broken Simputers and faraway technical support
Astonishingly, the survey found that only one in five Simputers used by the *sarpanchas* interviewed were in working condition. This number dwindled to just over one in ten for Simputers used by women representatives. Technical support was not usually available locally and the only option *sarpanchas* had was to go to the *Janpad Panchayata* offices (head offices for the area), which were as far away as 30 km from some of the villages.

"The need to visit the *Janpad Panchayat* office could have provided the female *sarpanchas* with an opportunity to get out of their houses and villages and to feel a sense of power while meeting the concerned officers face-to-face in their offices," noted Dr Saxena. "But most women explained to us that their male family members were in control of their official work and denied the women the little opportunity they had to leave their houses and villages. They actively prevented them from meeting others and learning from them."

This lack of support was internalised by the women.

"Many of the women we surveyed cannot appreciate the potential of technology to facilitate the work from their houses or from their villages."

GEM helps find solutions that will cater to women
At the Internet Governance Forum in Hyderabad in December 2008, Dr Saxena was able to share her evaluation findings with the Minister of Communications and Information Technology and others who are engaged in formulating and implementing rural e-governance programmes for gender integration in rural e-governance. She was also the only presenter who spoke about rural e-governance from a gender perspective at the XII National Conference on e-Governance in February 2009, held in Goa. This was the same conference where the chief secretary of the Chhattisgarh IT department and his staff received the gold award for the best implementation of another e-governance scheme in Chhattisgarh. Internationally, Dr Saxena managed to present her evaluation findings at the workshop on "Human-Centered Computing in International Development" in Boston in March 2009.

Despite her efforts, bringing about a change in attitude and the commitment of policy makers and state programme implementers has been slow. Dr Saxena's focus has mainly been to look at ways to effectively salvage the programme. While she has acted as a critic of the *e-gram suraj* (rural e-governance) scheme, it has been with the intention of improving what is the only e-governance programme that puts ICTs directly into the hands of female local leaders by analysing how it could be better implemented by addressing these female *sarpanchas*' needs, and in a more cost-effective way.

We have explicit proof that gender inequalities do exist and that there are workable solutions that can be tailored to the specific dynamics of this region, which will cater to the needs of Indian female *sarpanchas* in Chhattisgarh."

Incorporating a gender analysis has helped to uncover how ICTs are being used in ways that change gender biases and roles, or whether they reproduce and exaggerate existing ones.

"GEM," says Dr Saxena, "has given me the confidence to follow through with my advocacy."

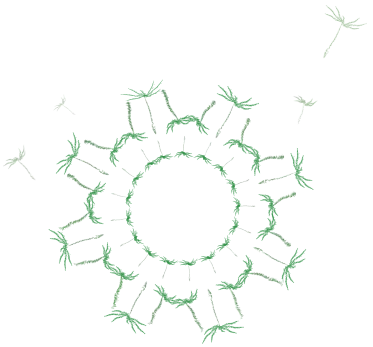
What can we learn from the gender evaluation experience of Dr Saxena and her team of researchers?

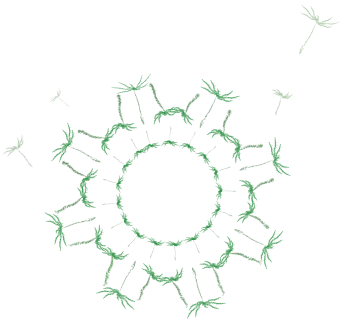
Dr Saxena and her team of researchers unearthed different layers of challenges that a state programme such as the *e-gram suraj* (rural e-governance) scheme could face. Political representation alone is insufficient to empower women in rural areas to take on leadership roles since gender inequalities are so entrenched in the cultural and religious belief systems. The use of GEM unearthed two critical issues. First is the issue of literacy. The experience of Dr Saxena and her team showed that using the national language, Hindi, cannot guarantee that women will be able to use ICTs effectively if the level used is too high. Second is the issue of ICT skills training. Clearly, men were able to benefit from the one-day training seminar because of other opportunities for learning that they could access within male-centric social circles which were not available to women. The two issues, literacy and training, are very useful insights for localisation initiatives which aim to facilitate better access to ICTs for the wider community, especially communities who do not speak, read or write in English.[10]

It is also important to note that Dr Saxena and her team used GEM to evaluate a state-implemented rural e-governance scheme, hence, a project that is not hers nor of the university where she works. This meant that "incorporating learning into the work", step 7 of GEM, literally demanded that Dr Saxena and her team had to advocate for policy changes or policy implementation changes. It might have been simpler to do advocacy if Dr Saxena and her team could have brought gender evaluation to the state governmental agencies on IT and rural development as well as the private company that developed the Simputer from the start. If this were achieved, buy-in by both the relevant governmental agencies and the private sector might have been easier to facilitate if the state government or the private company were themselves keen on conducting an evaluation to further improve the *e-gram suraj* (rural e-governance) scheme in Chhattisgarh, India. However, at the time of conducting the gender evaluation of the *e-gram suraj* scheme project, the state government was already intent on rolling out another large-scale project (100,000 Common Services Centres), which was designed at the national level.

[10] In practice, the term "localisation" encompasses but is not limited to: (1) Adapting and customising software so that a specific local community can use it; (2) Making ICTs linguistically and culturally appropriate to the target locality; and (3) Examining the rules and structure of the language concerned in order to determine keyboard layout, currency, dates, number format, and the interface. For a more elaborated definition of localisation, see Sarmad Hussain and Ram Mohan "Localization in Asia Pacific" in *Digital Review of Asia Pacific 2007/2008* ed. Felix Librero (New Delhi: Sage Publications India Ltd., 2008), 43-58
books.google.com/books?id=wSlOkuwWKo4C&pg=PA43&lpg=PA43&dq=localisation+%2B+Sarmad&source=bl&ots=0vLizGfrec&sig=KnIkB-B7kyl3SI-gvMxn7886nD4&hl=en&ei=GEAoTIe3Moe2rAeQvaz6BA&sa=X&oi=book_result&ct=result&resnum=6&ved=0CCQQ6AEwBQ#v=onepage&q&f=false.

SECTION 2:
RURAL ICTD PROJECTS FOR SOCIAL CHANGE





SECTION 2:
RURAL ICTD PROJECTS FOR SOCIAL CHANGE

2.1 Examples of gender and ICT issues in rural ICTD projects

Identifying gender and ICT issues in rural ICTD projects requires the use of the "gender lens."[11] This means having:

- The sensitivity and ability to recognise a gender issue
- The willingness and ability to analyse a gender issue
- The commitment and ability to act to address the gender issue, which often includes ensuring the process of women's empowerment.[12]

But what is gender? Gender is a socio-economic variable for analysing roles, responsibilities, constraints, opportunities, and needs of men and women in a given context. Gender is a concept that refers to the differences in the value and roles and responsibilities assigned to men and women. Gender is socially constructed and can change over time and can vary widely within and among cultures and communities. Gender inequality comes about when society places different values and expectations on women and men in relation to their expected roles and responsibilities. Boys and girls grow up learning what is expected of them in being "proper and acceptable" men and "proper and acceptable" women, fulfilling society's standards of acceptability of masculinity and femininity within women and men.[13]

[11] For a more thorough discussion on wearing the gender lens and conducting a gender analysis, see pages 35–38 of the GEM manual; also Section 2 of the guide entitled *Gender Analysis for ICT Localisation Initiatives*, on "How to Integrate a Gender Perspective".

[12] GEM emphasises women's empowerment within a gender equality framework. This is because GEM recognises that traditionally, women have had a subordinate position to men, where, for example: they may contribute materially to the household but the husband decides how the income is spent. On a macro-political level, most governing bodies are dominated by men. Legislative and judicial decisions often lack a gendered perspective and do not represent women's interests. ICT access and use may be similarly restricted. At the micro level, partiality towards boys may translate into allowing greater access to the family computer to sons rather than daughters. At the macro level, supposedly "gender-neutral" ICT policies regarding education, training, and price structure may have unintended yet very negative effects on gender roles and access to ICT resources.

[13] The definition of gender here is adapted from: Thomas E. Blair, Ed. *A Glossary of Terms in Gender and Sexuality*, 2nd Ed. (Nakhon Pathom, Thailand: The Southeast Asian Consortium on Gender, Sexuality and Health, 2007), 7 www.seaconsortium.net/autopagev3/show_page.php?group_id=1&auto_id=309&topic_id=309&topic_no=1&page=1&gaction=on

Gender analysis involves a systematic assessment of the different effects of the project activities on women and men. Used within an ICT context, gender analysis asserts that power relations in class, race/ethnicity, location, age, religion and culture can produce complex and hidden inequalities that affect social change.

Table 1 presents examples of basic gender analysis done by participants in past GEM workshops. The participants had presented contextual arguments that the following ICTs are gendered even though they seem to be gender neutral on the surface. A simple exercise like this using common symbols of ICTs is an effective strategy for finding out if project team members of ICT-type initiatives (projects or programmes) have a gender perspective or some level of gender analytical skills.

Table 1: Gendered ICTs

Which ICT?	Why is this ICT gendered?	How was the gender analysis conducted?[14]
Landline phones	• In India, acquiring landlines has many requirements which most women cannot meet, like ownership of residence or having a permanent residence. For a woman to apply and acquire a landline, she must first ask the permission of her husband who owns their house and has the earnings to pay for a landline. This is an example of how gender inequality issues are hidden • In Bangladesh, another requirement to apply for a landline is the possession of an identity card. Identity cards are imposed in Bangladesh and were implemented as part of broad government security measures. But many housewives do not have identity cards. This is an example of how gender inequality issues are hidden • It is expensive to install landlines. In India, 95% of landlines are owned by men because men have public mobility and are able to go out and work	The issue of "control" as it relates to decision-making is part of the gender analysis here. Women are able to have control over ICTs even before they can enjoy access to these. However, there are certain requirements before this can happen, and one of the basic conditions is that women have support from those in authority and power, including from within the family. These can be, and often are, their husbands or fathers or brothers. This is where gender discrimination intersects with patriarchal control and patriarchal belief. These examples clearly show how gender inequalities that are entrenched in a society have a large influence over the extent to which women have control as well as decision-making roles and positions. The examples also show to what extent they will be able to achieve higher levels of self-empowerment.

[14] For an introduction to the "levels of severity of gender problems", "a lens for identifying a gender issue" and "a lens for seeing the process of women's empowerment," please see pages 33–38 of the GEM manual.

Which ICT?	Why is this ICT gendered?	How was the gender analysis conducted?
Landline phones	• Landline bills can now be paid online. However, to be able to pay the phone bills online, one needs an online bank account and this not available to rural women. Women have to go to pay centres, which can be as far as 15 km away from women's homes in rural India. • Husbands have access and control of landline phones. Landline phones can be locked by using a code.	
Mobile phones	• Mobile phones have broken the control and access that men have on landline phones. Mobile phones are easier to acquire, providing women with access and control • Women have increased access to mobile phones. Many are comfortable with text messaging. But many women in rural areas cannot use text messaging services because many cannot read and write. In Bangladesh, voice message applications are now available on mobile cell phones. Illiterate women and men can send messages through the voice message option • There are security and privacy issues that have come up with the proliferation of the use of mobile phones. Young people use the mobile phones for dating and many young women have become victims when these dates turn awry or when their personal information is used to sexually harass them • Mobile phones with recording devices or photo cameras are good tools, but have also been used to harass people, and to sexually harass women	The issue of "access" is clearly considered here as part of the gender analysis of mobile phones. "Access" is not considered only from a supply perspective, but issues of ICT literacy, affordability, user-friendliness and women's public mobility were considered and included as part of the gender analysis. Another part of the gender analysis is to view how existing gender issues are exacerbated because of existing gender inequalities with the introduction of these ICTs, such as issues of privacy and security (higher risk of sexual harassment). There is a second layer to the gender analysis: how the levels of women's empowerment intersect with the levels of severity of gender problems. If mobile phones are used by women only to serve their gender concerns (to fulfil their gender roles and responsibilities) and not to challenge gender inequalities and gender issues and hence challenge gender relations (conscientisation, mobilisation, control), then, contextually, women are still only at the level of "access" as far as their empowerment is concerned.

Which ICT?	Why is this ICT gendered?	How was the gender analysis conducted?
Mobile phones	• Many mobile phones have a radio (AM/FM) capability which allows women to broadcast their issues and concerns, and to reach more women and a wider audience through such mobile phones.	It would be up to the project team to design interventions that would help women empower themselves in areas of "conscientisation", "mobilisation" or "control". However, if mobile phones are already used to mobilise women to collectively organise themselves to claim their rights, then they may already be enjoying empowerment at a more proactive (rather than passive) level, like "mobilisation".
The radio	• Radios are more affordable than TV sets, and privacy on the air can be more easily assured compared to assuring privacy over the internet • Radios are more portable and have a wider reach • Radios are more accessible than TV as a communication tool but whose voice do we often hear on the radio? • In a community in Mali, women have developed a listening group where they listen to radio programs, discuss the issues and send their feedback to the radio station • Women in rural areas can call in or announce their concerns on the community radio • Although there are radio programs devoted to women listeners in a rural area in Bilaspur, Chhattisgarh in India, local radio stations do not invite women as panelists on certain issues like politics.	This is a good example where "control" over content production, or having influence over the content, will increase the quality of women's access to the ICT in relation to the benefits (information and knowledge) that they can gain. This type of "control" will not only have a positive outcome in increasing women's access to information and knowledge that is more relevant to their gender practical needs and strategic gender interests, but can also prove to be a supportive platform for "conscientisation" and "mobilisation".
Laptops	• Because laptops are mobile and can be carried around, they have the potential to help women access technology. Laptops have the potential to "free" women who feel trapped • Laptops tend to be bulky and heavy if they are on the cheaper end of the scale. This makes	The gender analysis of laptops is very similar to the gender analysis of cell phones, because both are different forms of mobile technology. The women's empowerment level of "access" here again includes issues of affordability, ease of use, women's public mobility, ICT literacy, but

Which ICT?	Why is this ICT gendered?	How was the gender analysis conducted?
Laptops	it more difficult for women to move around with such laptops • Laptops can increase efficiency, especially since they can be brought home, but they do not necessarily transform gender roles. They can be the tools that contribute to the additional burden of women—bringing the work back home as women continue to perform all other chores at home • Laptops have a plus in terms of mobility and utility. But, laptops are more expensive than desktop computers, and thus, they may not be available—especially to women who have less income.	also technical issues such as as design, size and weight. The severity of gender problems problems would depend to what extent women own and are able to effectively use these laptops. So, issues of women's gender roles and responsibilities and gender relations will intersect with issues of women's empowerment at the levels of "conscientisation", "mobilisation" and "control".
Operating systems	• Most operating systems are not user-friendly and technical staff who know how to trouble-shoot are often men. With religious and cultural barriers that do not encourage women to socialise with men who are not family members and with limited freedom of movement in the public sphere, women may face additional barriers compared to men when learning how to configure them to their needs • Because instructions from those with technical know-how can be full of loaded terminology that is unfamiliar to most women (especially because women are usually the ones with lower levels of ICT literacy or with less exposure to ICTs), women will often have to rely on male technical staff or male members of the family who would do it for them. Very seldom would men teach women how to trouble-shoot for themselves	You will note that the gender analysis of operating systems is strongly linked to women's empowerment level of "control", at the highest end of the scale. "Control" here includes looking at the design of ICTs and the ease of configuring technical specifications, bearing in mind that women are often less exposed and have less opportunities and enjoy much less support and encouragement to learn such technical skills. So in terms of technical design and to what extent it is friendly to women, the highest levels of women's empowerment and the highest level of severity of gender problems (gender issue of training incentives, higher levels of technical training and employment growth opportunities for women in the field) come into play and need to be addressed. This is a good example of how the level of "control" in relation

Which ICT?	Why is this ICT gendered?	How was the gender analysis conducted?
Operating systems	• Women are also often less inclined to explore these technical specifications. There are few women who are knowledgeable in configuring operating systems. So women are often in the dark on how to protect themselves from hacking and from intrusion of their privacy.	to women's empowerment is important to achieve before "access", another level and area of women's empowerment, can be fully enjoyed by women.

Table 1 was only meant to present some examples from the field and some of the realities of rural women in relation to their access, use and control of ICTs from a gender perspective. It was not meant to be an exhaustive list. So what was inherent in all of these examples cited above that could help you do your own identification of gender and ICT issues in your rural ICTD project?

Gender issues are often invisible. This is the reason why feminists insist that one needs to wear a gender lens. To wear the gender lens, one is required to dig deeper, to interrogate what lies behind the visible problem. To wear a gender lens, one needs to know:

- What questions to ask
- How to ask the questions
- When to ask the questions
- Where to ask the questions.

Putting on the gender lens requires us to take a closer look at where women are vis-à-vis men in terms of their value in society, their roles, their responsibilities, and their control over and access to resources. Simultaneously, we need to examine women's environment/context, the social, the political, the economic influences, the belief systems, how society perceives them, who has power over women's lives, who makes decisions on their behalf, etc. Putting on the gender lens requires us to study:

- Whether the definition of "gender" is changing within that particular society or locality
- What the existing gender roles and responsibilities are, and to what extent these have changed
- What the existing gender relations (women and men, men and men, women and women) are, and to what extent these have changed
- The levels of empowerment enjoyed by women in this particular locality or context.

Answers to the questions above will then help point to design issues of a project or programme, and how to make it more effective in addressing gender.

Table 2 recommends some key questions that dig deeper and make gender issues visible within a rural ICTD project/initiative. They

[15] For more information, please see pages 25–30 of the GEM manual.

are meant to help organisations and project teams examine the situational context with a gender perspective, and to look beyond the "gender gap" (the observable and often measurable gap between women and men usually measured in terms of numbers or percentages). In themselves, the questions in Table 2 are not evaluation questions but serve to help the GEM user make a better situational analysis from a gender perspective and then, informed with this analysis, to develop evaluation questions that will help bring forth how the rural ICTD initiative addressed gender and in what areas it could be improved.

In Table 2, the main guiding questions can be categorised under four key concepts discussed in the GEM manual: "gender", "gender roles and responsibilities", "gender relations" and "women's empowerment".[15]

Table 2: Key questions in order to "dig deeper" and see gender

Main guiding questions	Key insightful questions
Gender—is the definition changing?	• Are there very minor differences in how girls and boys are socialised? Are these differences more pronounced in rural areas compared to urban areas, or vice-versa? • Are there still major differences in how older women are treated vis-à-vis older men? Are women considered "old" at a much younger age, compared to men? • Are there major differences in how women and men perceive the value of ICT policies and programmes? What influences these perceptions?
Gender roles and responsibilities—are they changing?	• Who and what defines these roles and responsibilities? • Who has the power? Is it "power over" (oppressive), "power with" (consultative, power-sharing), or "power within" (empowerment)? • Who has the control? Who decides? Are decisions made in a consultative manner, and if yes, with whom? • What is the definition of access? Who has access? • How is access limited, if at all, and why? • Whose voice is privileged? Whose mindset? Whose values? How do these influence how differently women and men benefit from development projects' interventions? • Are there cultural and/or religious beliefs that reinforce this influence and in what way? Which beliefs? • Are there traditional practices that reinforce this influence and in what way? Which traditions?
Gender relations (women and men, men and men, women and women)—are they changing?	• Who and what determines how women and men relate to each other in the household, in the community, and in the larger society? • Who has the power? Is it "power over" (oppressive), "power with" (consultative, power-sharing), or "power within" (empowerment)?

Main guiding questions	Key insightful questions
Gender relations (women and men, men and men, women and women)—are they changing?	• Who has the control? Who decides? Are decisions made in a consultative manner, and if yes, with whom? • What is the definition of access? Who has access? • How is access limited, if at all, and why? • Whose voice is privileged? Whose mindset? Whose values? How do these influence how differently women and men benefit from development projects' interventions? • Are there cultural and/or religious beliefs that reinforce this influence and in what way? Which beliefs? • Are there traditional practices that reinforce this influence and in what way? Which traditions?
Women's empowerment — are women's self-esteem, self-confidence and capacities changing?	• Are women "allowed"? Or are women encouraged and supported?

2.2 Key issue areas for social change for rural ICTD projects

In Section 2.1 it was noted that it is important to interrogate how women and men participate in and benefit from rural ICTD projects. Without a gender analysis which examines the gender considerations in the development and deployment of ICTs through rural ICTD projects, these projects may very well end up widening the digital gap between women and men. This may happen because ICTD initiatives are, in effect, deploying ICTs that already have embedded values, which are being transferred. What are those values, standards or conventions? Are they advancing or addressing existing gender relations and inequalities? What views and practices in gender relations are replicated or promoted? The challenge is to find out what roles women and men perform/play in ICTD efforts, which is often difficult as these are usually invisible in ICTD processes.

By using the gender analysis framework of GEM (looking at levels of women's empowerment addressed and levels of severity of gender problems)[16] in doing a situational analysis and before designing a project and developing the evaluation plan, the rural ICTD project team will be able to know how deep it can go in addressing the root causes of the gender and ICT issues and how it can help achieve institutional objectives of addressing gender, if there are any.

Matrix 1 identifies four key issue areas for social change where levels of severity of gender problems can vary depending on the context and situational analysis. The less gender inequality within a country or context, the higher the likelihood that these issue areas for social change could also sit on lower levels of severity of gender problems for that particular country or context.

[16] Levels of severity of gender problems are described in the GEM manual on pages 34 and 35, and the women's empowerment framework is described on pages 36–38. A more detailed description of these can also be found in Section 2.1 of the guide entitled *Gender Analysis for ICT Localisation Initiatives*, on "Wear the Gender Lens".

Matrix 1: GEM's proposed key issue areas for social change for rural ICTD projects

Issue areas for social change	Longwe's Women's Empowerment Framework[17]	Gender and ICT Issues
Access to resources and opportunities	• Welfare • Access.	• Opening hours • Distance • Content • Language • Cost • Cultural barriers • Mobility • Safety • Age • Sectoral issues • Urban-rural issues.

An example of specific gender and ICT issues in relation to access to resources and opportunities

There is a tendency to design ICT-type projects primarily from a supply perspective of resources and opportunities. Due to various reasons, such projects are not able to address gender and ICT issues in the locality or context in a holistic manner. This does not necessarily mean that the programme or project will continue to be unable to address gender and ICT issues in the future, especially if there is a "learning for change" culture surrounding the programme or project and additional resources can be accessed to expand on existing activities, products and/or services. An example is the experience of Fantsuam Foundation in Nigeria in evaluating its community wireless network, ZittNet.

Example 1: The Fantsuam Foundation first began its work in Kafanchan, a town in southern Kaduna State in north-central Nigeria. Kafanchan's economy had suffered a depression since the government shut down the once-thriving railway, the town's primary industry. No replacement industry has taken its place, resulting in crumbling infrastructure, a high unemployment rate, and the major economic activity being subsistence farming, with several redundant small and medium-sized enterprises. The Fantsuam Foundation is located in BayanLoco, a peri-urban slum of Kafanchan, but its activities and vision extend beyond Kafanchan toward all of Kaduna State.

[17] Sara H. Longwe, a gender expert from Lusaka, Zambia, argues that women's empowerment can be achieved by enabling women to wrest control of the factors of production, allowing them to participate equally in the development process of an activity or a project. Her "gender lens" framework breaks down gender analysis into three interrelated areas of analysis: examining the level of severity of gender problems, having a lens for analysing a gender issue and having a lens for seeing the proces of women's empowerment. Her paper "Spectacles for Seeing Gender in Project Evalaution" was delivered at a GEM Africa workshop on 16th November 2002. For more information see pages 33–38 of the GEM manual.

Matrix 1: GEM's proposed key issue areas for social change for rural ICTD projects (cont'd)

Issue areas for social change	Longwe's Women's Empowerment Framework	Gender and ICT Issues

There are a number of development challenges faced by residents of Kaduna State. The lack of jobs and income infrastructure including safe housing has resulted in a poor health sector, and many residents do not have access to affordable health care facilities or services. The rural urban migration has led to a brain drain of professionals to the urban areas to seek employment. The initial focus of the Fantsuam Foundation's activities was the provision of microfinance for women farmers and traders. Out of over 3,000 clients, 98% are women.

Nigeria is a male-dominated society, but the scourge of HIV/AIDS has brought about a reality check that demands equitable share of resources and responsibilities in order to enhance survival for all. In communities where many men in their child-bearing age have died, widows and children now take on traditional male roles without anyone raising an eyebrow.

The Fantsuam Foundation's use of information and communication technology for development resulted in significant successes, and this was enhanced after the first gender evaluation was undertaken in 2003. The adoption of GEM in the evaluation exercise and the evaluation results unearthed the following challenges faced by women who wished to become computer literate:

- Many women were not convinced of the immediate relevance of new skills to their daily lives
- Resource centre opening times conflicted with domestic priorities
- The style of instruction was too classroom-oriented, a more hands-on approach was preferred
- The predominant use of the English language prevented women from being able to write, input, and browse in their own languages.

Fantsuam's research under the Gender Research in Africa into ICTs for Empowerment (GRACE)[18] also identified empowering and disempowering challenges faced by Nigerian rural women as they tried to use mobile phones to meet their communication needs. These included:

- The high cost of ownership
- The weakening of family bonds in traditionally closely knit communities when people replaced opportunities for face-to-face communication with a phone call
- The fact that although Short Message Service (SMS) was cheap, it was not accessible due to low literacy capacities and a cultural preference for verbal communication.

[18] For more information on the GRACE network, see www.grace-network.net/index.php

Matrix 1: GEM's proposed key issue areas for social change for rural ICTD projects (cont'd)

Issue areas for social change	Longwe's Women's Empowerment Framework	Gender and ICT Issues

Various issues identified in Fantsuam's first application of GEM and the follow-up GRACE research can only be fully appreciated in the context of infrastructural constraints of rural communications. Most telecommunication infrastructure is designed to cater to urban and affluent populations. The service providers often refer to the end points of their distribution networks as the "last mile" and communities located on the "last mile" are usually rural and poor and therefore under-served. Wireless connectivity is often the preferred technology for providing access to these communities. The Fantsuam Foundation is located in a typical "last mile" community.

Fantsuam's wireless network project meets the basic definition of a rural ICTD project: its offices are located in a rural community; its primary targets are people in rural communities; it serves typical "last mile" communities; etc. Because the ZittNet project is located within an ongoing and successful women's microfinance programme, conducting a gender evaluation is imperative. The areas covered by the wireless network are also within the areas served by the microfinance. ZittNet's attempts to make its ICTD services affordable for adult men and women were often met with reactions that showed preference that such opportunities be given to the younger generations, irrespective of their gender. The classical socio-cultural markers of gender may be undergoing some transformation in these communities. The survival and/or herd instinct in these communities seem to dictate that scarce resources should be invested in the younger generation. With the major social services targeted at women, ZittNet had no problem of reaching out to the women. Its challenge was to encourage the use of its services by the women. The adult women would rather pass over these opportunities to their wards.

Learning for change: As a result of the gender evaluation of ZittNet conducted in 2008 using GEM, the Fantsuam Foundation was able to confirm that all of its microfinance clients (about 4,000) live within the area covered by the wireless network. These predominantly female clients are largely subsistence farmers who also engage in various micro and small enterprises for additional income generation. This rural population of Fantsuam clients represents less than 10% of the total population of these communities. This shows that potentially there is a large market for the ZittNet wireless service in these rural communities. However, low disposable income, combined with the high cost of bandwidth, illiteracy, language issues and financial constraints make the wireless services relatively inaccessible for the target population of Fantsuam's efforts.

The action-research using GEM has led to the development of new microfinance clients. This will be the case until there are successful partnerships and services that aim to address the issues of inadequate infrastructure, technical capacity and cost of

Matrix 1: GEM's proposed key issue areas for social change for rural ICTD projects (cont'd)

Issue areas for social change	Longwe's Women's Empowerment Framework	Gender and ICT Issues
of ownership which were identified as challenges faced by rural women in Nigeria. The ZittNet wireless network is more likely to achieve its poverty reduction objectives if it is deployed as part of a wider programme of support for rural female farmers. Such support must address issues of access, infrastructure, capacity-building, local content development, while providing opportunities for an increased awareness and participation of women in ICT-related activities in the Fantsuam partner communities. The women's cultural preference for voice communication over written or SMS modes suggests that voice communication should be one of the main determinants of the type(s) of technological infrastructure that is deployed for them. Finally, the shifting socio-cultural roles in response to the HIV/AIDS epidemic in the partner communities, and the increasing poverty levels in these communities dictate that providing the social services, which Fantsuam is already doing, should be complemented with affordable ICTD services. An affirmative action policy should be put in place to guide against a return to the patriarchal-determined roles, when the economy and health of these rural communities begin to improve.		

Issue areas for social change	Longwe's Women's Empowerment Framework	Gender and ICT Issues
Capabilities	• Access • Conscientisation.	• Literacy • Education • Skills training—what level? • Employment—what level? • Use (immediate needs).
Examples of specific gender and ICT issues in relation to capabilities **Example 2:** The localisation initiatives under PANL10n used gendered Outcome Mapping (OMg) to plan, monitor and evaluate their projects.[19] Because of this, they had different outcome challenges and progress markers for each boundary partner.[20] Their evaluation plans showed the different strategies to effect change from within the boundary partners by understanding the social and cultural settings that affect them. Because the female boundary partners are limited by their circumstances, the evaluation plan		

[19] The GEM training workshops had contributed to the development of the gendered Outcome Mapping (OMg) framework and had strengthened the gender sensitisation approach that was adopted by the PAN L10n. Dareecha used the OMg as its evaluation methodology. Outcome Mapping is a planning, monitoring and evaluation methodology developed by Sarah Earl, Fred Carden and Terry Smutylo in 2001. Outcome Mapping focuses on a specific type of result—outcomes as behavioural change. See: Sarah Earl, Fred Carden and Terry Smutylo *Outcome Mapping: Building Learning and Reflection into Development Programs* (Ottawa, Canada: International Development Research Centre, 2001).

[20] "Boundary partners" is a concept used in Outcome Mapping, and is defined as "Those individuals, groups or organisations with whom the programme interacts directly and with whom the programme can anticipate some opportunities for influence."

Matrix 1: GEM's proposed key issue areas for social change for rural ICTD projects (cont'd)

Issue areas for social change	Longwe's Women's Empowerment Framework	Gender and ICT Issues

that the localisation initiatives developed employed specific strategies to address their needs. However, this meant setting lower levels of "expected achievement" for female boundary partners compared to male boundary partners.

The rationale for the different levels of achievement between women and men was further explained through an example from the Dareecha project. The team from Dareecha argued that the different outcome challenges that Dareecha had for male school principals and female school principals show gender differences; not capabilities. The male school principal is expected to run a business model while the female school principal is expected to deliver training sessions to other schools. The female school principal is not expected to run the business model because she has to go home to attend to her family and household. It does not mean that she does not have the capacity to run a business model. It shows that the culture and society she belongs to impose conditions on her that are different from those imposed on the men. The men are not expected to perform or even have a share in doing the household chores, which is why they can stay out late, even after work. The women take care of the family and the house.

The different outcome challenges, it was argued, show a keen understanding of gender differences. However, the same project had different outcome challenges for male and female students because they assumed that the girls would not achieve the same outcome challenges to the same degree or level due to the different starting points of girls vis-à-vis boys and the effects of past and current discrimination against girls. Overall, the project had the same objective which was for all students to be able to use the local software. However, the expectation was for the boys to use the software competently, and for the girls, to demonstrate the use of the software, and not necessarily be able to use the software competently.

The second example from the same project differentiates the capacity of boys and girls "to achieve a certain level of skills." In this way, the second example is about capabilities of the girls vis-à-vis the boys, and not necessarily about the differences in gender. Ideally, the same level of skills should be expected as an achievement from both boys and girls but different strategies should have been designed and used to bring about this achievement. As it turned out, towards the end of the project, the Dareecha team had observed that in one of the rural schools in Pakistan, the male teacher had his two young daughters aged 10 and 12 learn the computer along with his son in an all-male school (catering to boys' education between the ages of 14 and 17). The male school principal did not object and neither did fellow male teachers or other male students. His 12-year-old daughter turned out to be better skilled at the computer than his 14-year-old son and would teach her brother how to do certain things on the computer. She also won first prize when a competition was organised to measure the computer skills acquired by the children.

Matrix 1: GEM's proposed key issue areas for social change for rural ICTD projects (cont'd)

Issue areas for social change	Longwe's Women's Empowerment Framework	Gender and ICT Issues

This showed that even if the project did not think of designing a specific strategy, the girl managed to outperform the boys only because her father had encouraged and supported her in learning the computer. This happened without the project specifically designing a strategy that would support girls achieving the same level of ICT skills as the boys. In the future, a strategy around the role of male teachers who have very young daughters of a similar age may be a plausible design and could be used to ensure that boys and girls achieve the same level of ICT skills. It may also be possible to deploy similar supportive intervention strategies in similar rural contexts with these kinds of gender-biased social barriers.

The Dareecha experience points to the critical difference in appreciating capabilities distinct from the barriers faced. It also challenges everyone to consider to what extent it is possible to design and implement intervention strategies to counter gender-biased barriers so that the project equally optimises and increases the capabilities of both girls and boys, or women and men.

Example 3: The Delhi-based Studies in Information Technology Applications (SITA) project was launched in 1998 by Dr K. Sane, with funding from World Bank's InfoDev, to provide computer skills training to poor and disadvantaged women. SITA's aim was to empower low-income women from rural, suburban and urban areas through computer training customised to meet the demands of both the public and private sectors.[21] Women from two geographical regions, the Union Territory of Delhi and the adjacent state of Haryana, were targeted by this project. The SITA training package enabled intensive hands-on computer training with multi-lingual, audio-visual and interactive multimedia modules for self-learning. Wherever possible, trainees were also attached to a potential employer. A majority of the trainees involved in the project achieved commendable proficiency in basic computer skills.

SITA experienced a financial crisis in the year 2001, after Infodev support ended. At this point, Khalsa College (Delhi University) stepped in to provide the much-needed infrastructural support and facilitated SITA's interaction with the UN Asia-Pacific Centre for Technology Transfer (APCTT) based in Delhi. The APCTT played an important role in the identification of "internship" as an intermediate step in the process of securing jobs for SITA's women. The SITA women also set up a cooperative called Mitra Mandal to take up job assignments. Mitra Mandal is, however, finding it difficult to perform as envisioned.

[21] Reshmi Sarkar "Building Information Societies: Grappling with Gendered Fault-Lines"; cited in Angela M. Kuga Thas, Chat Garcia Ramilo and Cheekay Cinco. 2007. Gender and ICT. [e-primer]. Bangkok: United Nations Development Programme–Asia-Pacific Development Information Programme (UNDP-APDIP), 35. www.apdip.net/publications/iespprimers/eprimer-gender.pdf

Matrix 1: GEM's proposed key issue areas for social change for rural ICTD projects (cont'd)

Issue areas for social change	Longwe's Women's Empowerment Framework	Gender and ICT Issues

"The most important thing that Mitra Mandal needs is marketing," says Mukul Ahmad of APCTT "Everyone in Mitra Mandal was trained in IT, but there was no component developed to market the training. With the lack of confidence that comes from social and economic deprivation, marketing became a problem for those trained. Also, the women's lack of proficiency in the English language, no public relations workers from among them and their own socio-economic situations have fallen in the way of anything permanent and meaningful for them."

For the SITA-Mitra Mandal endeavour, the poor response of the labour market to the trainees has been a disappointing experience. The inability of a majority of women to find jobs shows that good education by itself does not serve the needs of the individuals from the disadvantaged sector, since only a handful of the 500 women trained by SITA have jobs. Another unanticipated difficulty was the inability of the trainees to maintain stable employment after finding a job. This occurred for various reasons including: poor communication skills (particularly in English) after most of the trainees had studied in government-run Hindi-medium schools; low confidence levels caused by a tradition that regarded a girl as a liability; and, a lack of family support given that low-income families that were not able to afford domestic help, baby sitters, etc.

The women that SITA caters to have to work at home even if they work outside with very little support from the men in their households. This disproved the premise that effective IT training for jobs was enough to enable individuals to find jobs and build their own future. SITA has demonstrated that this is inapplicable for most persons from a disadvantaged background, particularly women. Furthermore, the SITA experience has shown that giving these women IT training alone may do more harm than good as it breeds frustration through unfulfilled expectations that end up by adding to the alienation and disillusionment largely because of the lack of complementary intervention strategies that are persuasive and supportive in challenging and addressing the different socio-cultural barriers faced by women that are rooted in gender and social inequality.

This case shows that while economically disadvantaged women possess the capabilities to qualify on the job, training initiatives that are not effectively linked to the employment market come with stumbling blocks. If the benefits of IT have to trickle down to poor women, the larger institutional framework of the IT industry has to make spaces for the poor in general, and poor women in particular. The story of SITA shows the need for a more proactive policy in public and private institutions towards induction and mentoring of socially disadvantaged women.

Matrix 1: GEM's proposed key issue areas for social change for rural ICTD projects (cont'd)

Issue areas for social change	Longwe's Women's Empowerment Framework	Gender and ICT Issues
Voice	• Access • Conscientisation • Mobilisation.	• Self-confidence • Awareness • Questioning • Participation (active) • Content creation • Use (strategic needs) • Producer • Security • Privacy • Women organising.

An example of specific gender and ICT issues in relation to voice

Example 4: The gender evaluation of the *e-gram suraj* scheme (rural e-governance scheme) in Chhattisgarh, India by Dr Anupama Saxena and her team revealed that often, ICTs are introduced with little consultation done on the actual needs and realities of the end-users, in this case, the *sarpanchas* (democratically elected village heads), and that there are acute gender differentials for female and male *sarpanchas* (see also Box 2 in Section 1.3 of this document). There are four main reasons why female *sarpanchas* are unable to participate effectively in governance despite having been democratically elected. These are:

1. **Language, literacy, and prior exposure to technology:** The content of the Simputer has many words in English. Only 29% of female *sarpanchas* have a working knowledge of English whereas more than 66% of male *sarpanchas* possess this knowledge. The content on the Simputer is mostly in Hindi, but 17% of the men and almost 30% of the female *sarpanchas* are not fluent in Hindi. Most of them are fluent in the local dialect, Chhattisgarhi. Hence, most of the women are not able to understand the content. Their language skills are closely linked with their educational levels. For this indicator as well, there is a wide gender gap as 11.7% of women and 2.6% of men are illiterate. Also, while 20.5% of men received education higher than the 12th grade no women did, and while 17.9% men received education up to the level of Senior Secondary, the percentage of women in this category is a mere 5.9%. The gender evaluation showed that prior exposure to technology helps in increasing the capacities of women and men to be able to manage and use ICTs. On this indicator also, the gender differences are very obvious. Only 39% of male and 23% of female *sarpanchas* had prior exposure to technology in general.

2. **Content of the Simputer:** Many of the women do not find the content on the Simputer useful and this is one of the reasons why they are not interested in using the Simputers. The main reason for not finding the content of the Simputers useful is that currently, the content includes only information related to the *Gram Panchayatas* but most of the women are not able to actually perform their work and roles as *sarpanchas* due to social and cultural obstacles, such as their husbands not allowing them to play their roles and taking on these roles themselves or their husbands not allowing them to move around in public unaccompanied. The other reason for not finding the

Matrix 1: GEM's proposed key issue areas for social change for rural ICTD projects (cont'd)

Issue areas for social change	Longwe's Women's Empowerment Framework	Gender and ICT Issues

content useful is the women's lack of command over English and the high level of Hindi used.

3. **Technical problems:** There are many technical problems that *sarpanchas* face when they do try to use the Simputers. These include broken parts, problems with software, and discharged batteries. Women are facing more problems because of their low education level, their having less exposure to and experience with technology and their limited public mobility.

4. **Access to support system, training and maintenance:** More than 53% of female *sarpanchas* faced problems during training. The problems included transportation issues, the non-provision of lunch, language, disinterest, etc. Many of the women could not understand anything that was imparted during the one-day training session and 90% of the female *sarpanchas* had to attend the training with a male member of the family or with the *sachiv* (secretary of the Village Panchayat, appointed by government and, usually, male) because being women, society would judge or ridicule them if they were to attend the training session alone. It was found that the male *sarpanchas*, because of their greater exposure to new technologies such as mobile phones and, in some cases, computers, were more comfortable during the one-day training session and could understand how to handle the Simputers. Moreover, as they were better educated and better skilled in the relevant languages, it was easier for them to grasp whatever was explained during the sessions. Another advantage with men was that they learned from fellow men whereas women did not have such opportunities, and the training session was the only place where they had a chance to learn how to use the Simputer properly. Understandably, the women found the duration of the training insufficient; they were not able to understand the language of the trainers; all trainers were male so women felt hesitant in asking questions; and, because there were no separate provisions for women they felt shy in asking questions. The lack of proper training resulted in the lack of interest in using the technology among the female *sarpanchas*. In addition, no support system was established at the local level to conduct repairs and maintenance of the Simputers. The only option that the *sarpanchas* had if their Simputer were to malfunction was to rush to the Janpad Panchayata office that is located more than 30 km away from some of the villages. At the time of the gender evaluation, only 17.6% of the total number of Simputers was in working condition. The gender gap was quite evident even on this issue. 20.5% of the Simputers owned by male *sarpanchas* were in working condition and only 11.7% of the Simputers owned by female *sarpanchas* were in working condition.

The gender evaluation of the e-gram suraj (rural e-governance) scheme of Chhattisgarh shows that while the reservation of seats for women's political participation does allow for women's representation, other factors obstruct or effectively facilitate women actually fulfilling these leadership and decision-making roles reserved for them. Putting technology directly into the hands of women is indeed a good initiative, and Dr Anupama Saxena's evaluation findings show that there is a need to do more than this to effectively enable and facilitate women's voice in leadership and decision-making (see the stories below).

Matrix 1: GEM's proposed key issue areas for social change for rural ICTD projects (cont'd)

Issue areas for social change	Longwe's Women's Empowerment Framework	Gender and ICT Issues
Power and decision-making	• Mobilisation • Control.	• Leadership roles • Advocacy roles • Decision-making • Ownership of resources • Equal access to and ability to take advantage of opportunities • Privacy • Security • Political participation • Community organising.

An example of specific gender and ICT issues in relation to power and decision-making

Often, the causes for gender and ICT issues in relation to power and decision-making are rooted in social and cultural barriers which are in turn strongly linked to the perceived value of women (as inferior) vis-à-vis men in society, and can affect women's participation at all levels, from the household, to the community. This also occurs at the institutional level in both the private and the public spheres. Three interesting stories come from women elected representatives (*sarpanchas*) during the gender evaluation research conducted by Dr Anupama Saxena and her team on Chhattisgarh's *e-gram suraj* scheme (rural e-governance scheme). These stories clearly show that while gender and ICT issues relate to the design and use of the Simputers (see previous example on "voice" as an issue area for social change), "giving a Simputer", even if it were in full working condition, is not sufficient if the aim is to achieve equal participation of women and men in power and decision-making in rural governance.

Asha's story

Asha was one of the female *sarpanchas* whom Dr Anupama Saxena and her research team visited during their primary field survey for the gender evaluation of Chhattisgarh's *e-gram suraj* (rural e-governance) scheme. Asha belongs to one of the untouchable communities, the leather workers. The practice of untouchability is legally banned in India but in rural areas, the practice prevails. Asha has passed

Matrix 1: GEM's proposed key issue areas for social change for rural ICTD projects (cont'd)

Issue areas for social change	Longwe's Women's Empowerment Framework	Gender and ICT Issues

the 12th grade and received the chance to become the *sarpancha* because of the 33% reservation of seats for women and also because out of this 33%, a further 12% of seats are reserved for Scheduled Caste Women (Scheduled Caste includes the *dalits* who are untouchables and are given special protection and privileges in the Indian constitution). Asha was elected unopposed because she was the only woman from her village who fulfilled the requirements for the reserved seat for Scheduled Cast Women.

Initially when Asha became a *sarpancha*, her *sachiv* (secretary of the Village Panchayat, appointed by government) who was male and from the general caste started harassing her and did not allow her to do any work as *sarpancha* for more than one year. She went to the Panchayat officer at the Block Level and complained. She was asked: "If I give you a new *sachiv* will you work well?" She said "Yes" and he transferred the one who was harassing her and appointed a new *sachiv* for her. After that, she started working with the new *sachiv* and could do a lot of work including establishing *aganwadis* (preschool care centres in villages for poor children aged 0–6), undertaking the renovation of the village ponds, and other activities.

At the time of the gender evaluation of the *e-gram suraj* scheme, Asha lived with her family in a house located in the outskirts of the village. Because of their caste, they were not allowed to live inside the village with the majority of the community, which are of general and backward classes. Asha, as a *dalit*, was not allowed to touch water resources of the village like the water taps. On another occasion, before Asha was elected as *sarpancha*, she touched one of the water taps and the villagers declared that from then onwards, they would not be using that tap. After Asha was elected *sarpancha*, she touched all 12 water taps of the village. The villagers did not have any choice other than to start using the water taps again. Other things have changed for her since she became the *sarpancha*. She could get electricity for her house that she was not able to get earlier.

Her husband has always been supportive of her and in her role as *sarpancha*. However, her in-laws were not happy initially as they thought that she should help in earning an income for the family. Eventually, their attitude and perspective changed because of the respect she was getting from the villagers.

Her deputy *sarpancha* does not have cordial relations with her and keeps on creating hurdles for her but with the help of the *sachiv*, she manages to work.

Matrix 1: GEM's proposed key issue areas for social change for rural ICTD projects (cont'd)

Issue areas for social change	Longwe's Women's Empowerment Framework	Gender and ICT Issues

However, she does not have a mobile phone so contacting her had to be done through the sachiv. When asked if she would like to stand in elections again she says: "The villagers say that they will vote for me irrespective of whosoever contests against me (the seats have a rotational reservation system)."

"But I will give my vote to that deputy *sarpancha* who is always criticising me, to see what he does for the village," she says, with a mischievous smile.

Mageswari's story

Mageswari was one of the female *sarpanchas* during the gender evaluation of Chhattisgarh's *e-gram suraj* (rural e-governance) scheme. At the time, Mageswari was in her late thirties and had passed the 12th grade before her marriage. She belongs to the Backward Class category. Her family's income lies just above the poverty line. She does not know English and is fluent in Hindi and Chhattisgarhi. Her husband is a *panch* in the same village *panchayat*. She was a *panch*[22] in their former *panchayat*. Her husband and her son are very supportive of her role as *sarpancha*. Though the primary responsibility of managing household affairs rests upon her, her husband and her son help her in the household tasks. She was elected as *sarpancha* because the seat is reserved for backward category women. She says that without the political participation reservation, it would not have been possible for her to get elected.

Mageswari showed that she has a very deep knowledge about the implications of technology for the rural economy. She was opposed to the introduction of the Simputer. When asked why, she initially gave very superficial reasons that "it was of no use", etc. After some prodding, she shared two very interesting observations.

Mageswari said that if Simputers were actually used as they were supposed to be, many people in the rural areas would be at a loss. She said that there are 64 Village *Panchayat*as in the Block and at least two persons used to visit the block office at least thrice in a week due to different types of work from their respective villages. In this way, the bus wala would earn some money. These people used to take tea and some refreshments at the block office, so the tea wala would earn some money. The lady peon at the block office used to serve them water and so on, and they would give her some rupees. So the lady peon would earn

[22] The panchayat raj is a South Asian political system mainly in India, Pakistan, and Nepal. "Panchayat" literally means assembly (yat) of five (panch) wise and respected elders chosen and accepted by the village community.

Matrix 1: GEM's proposed key issue areas for social change for rural ICTD projects (cont'd)

Issue areas for social change	Longwe's Women's Empowerment Framework	Gender and ICT Issues

something too. If the Simputers were in full working condition and adequately user-friendly, meeting the needs of both female and male *sarpancha*s, the *sarpancha*s would not need to go out of their villages, and that would mean that all of these people would earn less in due time. Mageswari also said that *sarpanchas* are paid a very small honorarium by the government and yet they have to devote their full time to the work as a *sarpancha*. They often earn through some level of corruption. These Simputers will stop that potential in earnings.

"Who would like to become a *Sarpancha* then?" Mageswari asks.

During one of the field visits with her, she was busy with the renovation work of the village pond under the employment guarantee scheme for the poor villagers.

"Look, a machine can finish the work within hours," she said, "but then, what will happen to the employment of so many poor villagers?"

In expressing these thoughts, Mageswari had echoed the feelings of some of the other female *sarpanchas* who feel that they really enjoy going to the Block level office, alone or with their husbands. Although the Simputers could facilitate them working from their own villages and from their own homes, they felt that they would be losing the rare opportunity of moving out of their houses and of meeting with people outside of their household and villages. Mageswari also expressed the apprehension that this working from their home facility will only further ensure that male members of the house will be doing the work of the *sarpancha*, even if the woman were the one elected. Currently, it is only because of the reservation for women's political representation that they are required to elect and accept women as *sarpanchas*.

Padma's story

Padma was one of the female *sarpanchas* interviewed during the gender evaluation of the *e-gram suraj* (rural e-governance) scheme of Chhattisgarh, India, conducted by Dr Anupama Saxena and her research team.

At the time, Padma was in her early thirties and had passed higher secondary before her marriage. She belongs to the General Caste and to the "Vaishnav" community. This community is considered a higher caste community in the society. Her family's income lies above the poverty line. She has passed the 12th grade. She was divorced from her husband because he had a habit of drinking

Matrix 1: GEM's proposed key issue areas for social change for rural ICTD projects (cont'd)

Issue areas for social change	Longwe's Women's Empowerment Framework	Gender and ICT Issues

and he used to harass her. He did not like her actively taking part in all *Panchayata* activities and even started beating her. She has a working knowledge of English and Chhattisgarhi (local dialect) and is fluent in Hindi. She could contest and was elected as *sarpancha* because the seat was reserved for general category women. She believes that without the political participation reservation for women, it would not have been possible for her to get elected.

Padma was a very active *sarpancha*. Six months prior to the interview, she was dismissed as sarpancha as the "*Panchayata*", the executive body of Village *panchayata*, consisting of elected ward representatives from the village, passed a no-confidence motion against her. She had to give her post to a woman *pancha*. When asked about the details of the incident, Padma gave a long account that describes the power dynamics prevailing in the rural areas and the problems a woman elected representative faces.

According to Padma, the village secretary was unhappy with her on financial matters. According to her, he wanted to continue with his corrupt activities in the development work done by the *Panchayata*, whereas she wanted to work fairly. Earlier, Padma had a tussle with the Chief Executive Officer of the *Janpad Panchayata* (Block Level *Panchayata*) on the issue of delayed distribution of cheques for work done in the villages to the *sarpanchas*. Padma led a protest against the CEO and succeeded in getting the issue resolved in the favour of *sarpanchas*. That CEO was new to his office that time and he took this incident as a personal insult.

Coincidently, the *sachiv* and the CEO happened to be former school classmates. Hence, when she faced problems from the *sachiv*, the CEO provided all help to the *sachiv* and did nothing to favour Padma. She added that the *sachiv* would not have succeeded if she had not left the village to attend a seven-day workshop in another village. During this time, the *sachiv* was able to get all *panchas* to shift their loyalty. He distributed liquor and used women to lure male *panchas*. The female *panchas* acted according to the will of their husbands and the husbands joined the *sachiv*. The *sachiv* also assured them of their share in the funds of the *panchayata*. Padma says that if she had remained in the village, either they would not have been able to conspire against her or she would have also managed them in the same manner using liquor by asking one of her male friends to help her in this. Padma says that the situation is almost the same in most of the villages. Very few female *sarpanchas* are able to act as *sarpanchas*, and those like Padma when they dare to do so, face

Matrix 1: GEM's proposed key issue areas for social change for rural ICTD projects (cont'd)

Issue areas for social change	Longwe's Women's Empowerment Framework	Gender and ICT Issues

many problems. Padma had a legal option to fight against the injustice done to her. But she said that she needed at least 50,000 rupees to fight a legal battle and it was also time-consuming. As only six months were left for her tenure as *sarpancha*, she gave up the idea of fighting a legal battle.

Dr Anupama Saxena and her research team found Padma to be an exception among the female *sarpanchas* they had contacted. She was very dynamic, very courageous and very confident. For all these qualities, she gave credit to her family, especially to her grandfather who taught her never to leave the path of truth and justice. She said that she was brought up in a family where boys and girls were not discriminated. Padma is one of only two female *sarpanchas* who owned a mobile phone. She used the Simputer—she listened to songs on it and is very keen to use the internet through it. She feels very comfortable in using the Simputer. She had felt that the duration of the training was not sufficient and that *sarpanchas* also needed training to repair the Simputers.

Notes to stories:

1. Names have been changed and some details withheld to safeguard the privacy and security of the female *sarpanchas* who were interviewed during the gender evaluation conducted by Dr Anupama Saxena and her research team members.

2. Reservations are intended to increase the social diversity in educational institutes, the political sphere and workplaces for certain identifiable groups that are grossly under-represented in proportion to their numbers in the general population. Caste is the most used criteria to identify under-represented groups. After India gained independence, the Constitution of India listed some erstwhile groups as Scheduled Castes (SC) and Scheduled Tribes (ST). The framers of the constitution believed that, due to the caste system, SCs and the STs were historically oppressed and denied respect and equal opportunity in Indian society and were thus under-represented in nation-building activities. Seats are reserved for Schedules Castes, Scheduled Tribes, and Other Backward Castes in varying ratio by the central government and state government.

3. The reservation of seats for women has been increased from 33% to 50% and the rotation of reservation has also been extended from five years to ten years.

Matrix 1: GEM's proposed key issue areas for social change for rural ICTD projects (cont'd)

Issue areas for social change	Longwe's Women's Empowerment Framework	Gender and ICT Issues
4. Officially, a *sachiv* can be male or female. In reality, *sachiv*s are usually males. Women's organisations have been demanding for a reservation quota for women in this post on the grounds that female *sarpanchas* will feel more comfortable with a female *sachiv*. But the proposal is still pending with the government. Generally, even the female *sarpanchas* prefer a male *sachiv* as all official work is done by the *sachiv* (due to the gender issues faced by women in relation to their public mobility and interactions with men). 5. The *gram panchayat* (meaning village assembly, which is a form of local village government) is a body that includes both *panchas* and *sarpanchas*. There are many wards in a village and each ward is represented by a *panch*. Elections are conducted for *panchas* every five years and 33% to 50% of seats are reserved for women every five years and 33% to 50% of seats are reserved for women candidates. Generally, there are 5 to 15 *panchas* in a village *panchayata* depending on the population. The *sarpancha* is the head of the *panchayata*. She/he is also directly elected by the villagers every five years. Each village has one *sarpancha* only. 6. There is a fixed monthly honorarium for *sarpanchas* but not for *panchas*. It varies from state to state. Generally, it is between 500 INR to 1500 INR (45 INR = 1 US $). 7. The cheques that Padma mentioned were for the development work in the village. The grant for development work is given by the state/central government by cheque to the *sarpanchas*.		

The examples presented in Matrix 1 and the gender and ICT issues raised in relation to project design and implementation issues closely relate to what Outcome Mapping[23] (OM) suggests as part of project planning—identifying your strategy map[24] (see Matrix 2), in order to be better able to consciously address these issues. The strategy map can be more gender-sensitive when a gender lens is applied when planning and designing a project. That often means thinking of and deploying different strategies for not only women's and men's equal participation in the project, but to ensure that women and men benefit equally from the project.[25] Often, this will mean thinking of and designing suitable intervention strategies that are persuasive and/or supportive.

[23] Outcome Mapping offers a methodology that can be used to create planning, monitoring and evaluation mechanisms to enable organisations to document, learn from and report on their achievements. Outcome Mapping focuses on a specific type of result—outcomes as behavioural change. For more information on Outcome Mapping, it might be useful to visit the Outcome Mapping Learning Community website, developed in close collaboration with users of Outcome Mapping from across the world. See www.outcomemapping.ca.

[24] Outcome Mapping defines the strategy map as, "A matrix that categorises six strategy types (causal, persuasive and supportive), which a programme employs to influence its boundary partners. Strategies are aimed at either the boundary partner or the environment in which the boundary partner operates."

[25] For more information on the strategy map, please see Outcome Mapping manual pages 61 and 63.

Matrix 2: Strategy map

Strategies	Causal	Persuasive	Supportive
Individual (aimed at individual, organisational or institutional boundary partners)[26]	• What will be done to produce an immediate output? Usually, causal strategies are direct inputs that produce an immediate output, like purchase of equipment, set up of a lab, etc. When these strategies are employed, the primary control and responsibility for the consequences rests only with the programme or project. These strategies are the only ones that can influence a direct input or output.	• What will be done to build capacity or bring about a change in level of skills and knowledge, attitudes and practices? Usually, persuasive strategies are designed to encourage or influence behaviour change, but these strategies cannot guarantee 100% direct influence on effecting that behaviour change. These strategies are aimed at facilitating change, but the ultimate responsibility rests with the individual or group, or institution (for example: with the boundary partner).	• How will sustained support, mentoring or guidance be provided? Usually, supportive strategies are designed to help sustain the effected behaviour change so that medium to longer-term impact can be achieved. Their effectiveness will rely very much on the boundary partners' active participation and sustained interest and motivation. These strategies are aimed at facilitating change, but the ultimate responsibility rests with the individual or group, or institution (for example: with the boundary partner).
Environment (aimed at the boundary partner's environment)	• What will be done to alter the physical or policy environment?	• How will the media or publications be used? Are there other channels that are community-based that could be used?	• What networks or relationships will be established or utilised?

[26] "Boundary partners" is a concept used in Outcome Mapping, and defined as, "Those individuals, groups or organisations with whom the programme interacts directly and with whom the program can anticipate some opportunities for influence."

If this strategy map is used, take note that Outcome Mapping emphasises that the strategy map exercise is not simply to ensure that all boxes have something in them. Some boxes may appropriately be left empty, depending on the nature of the programme's or project's work. The appropriateness of strategies largely depends on the type of changes that the programme or project wants to encourage in its boundary partner.[27]

2.3 Gender issues in a project's life cycle

When considering the project evaluation, it is interesting to review it by examining the gender component in the project's life cycle. It is also important to consider the assumptions made on gender and ICT issues at the beginning of the project and whether gender was present in the project planning phase.

As an exercise to consider these components and their presence in your project, fill in the following matrix, Matrix 3, including your findings. Remember that if the project had no gender-oriented goal, that is an important evaluation finding as well.

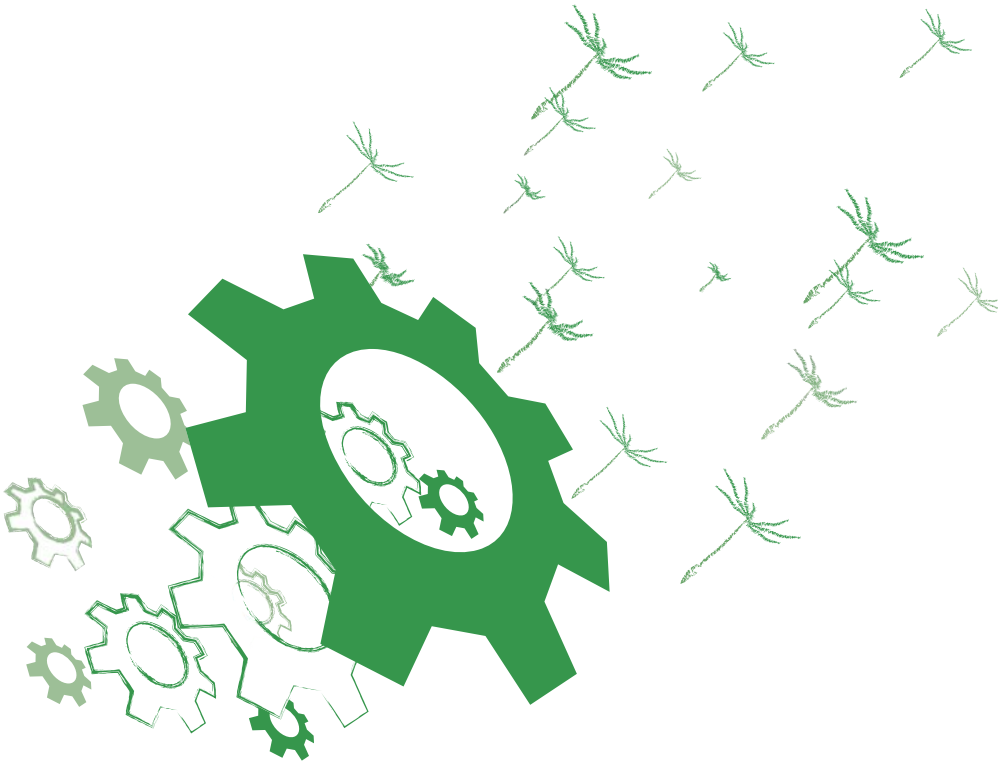
Matrix 3: Gender issues in a project's life cycle

Components	Considerations	Findings
Situation analysis:	It is important to include a description of relevant gender issues in the project.	
Policy imperatives:	Are there aspects of the policy environment that are relevant for deciding actions? (For example: equal opportunity laws, media regulations, community media regulations, telecentre regulations, ICTD agenda in the country, rural development policy, etc.)	
Problem identification:	Identify gender and ICT issues in the implementation of the project.	
Intervention strategies:	In the case of gender issues, intervention strategies are effective only when they address the underlying causes of the gender issue. Persuasive and supportive-type strategies play a more prominent role if gender issues are to be effectively addressed. Without such strategies, there is a very high likelihood that gender will fade away.	

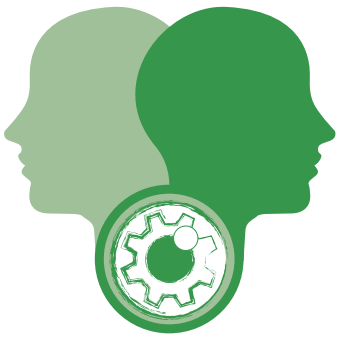
[27] Outcome Mapping, 62

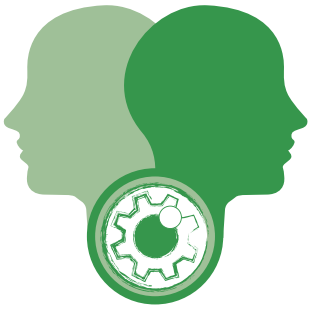
Matrix 3: Gender issues in a project's life cycle (cont'd)

Components	Considerations	Findings
Implementation Strategies:	It is important to distinguish between broader, strategic issues from more specific and tangible problems.	
Defining Objectives:	Include objectives that are gender-aware or gender-sensitive.	
Defining Outcomes:	One cannot expect outcomes addressing gender if there are no gender goals in the project. One also cannot expect outcomes that have addressed gender to a certain extent if specific strategies are not designed to address the identified gender and ICT issues. This also explicitly implies that data being monitored (both quantitative and qualitative) has to be sex disaggregated and gender-sensitive.	



SECTION 3:
BEFORE YOU BEGIN A GENDER EVALUATION





SECTION 3 : BEFORE YOU BEGIN A GENDER EVALUATION

3.1 Conducting a gender evaluation: What do you need to consider?

The GEM manual stresses the importance of "integrating gender" in the composition of the evaluation team. This means that at least one member of the team should have an understanding of gender issues and experience working with gender, but that the team should not be over-reliant on this one person to ensure that gender is integrated throughout the evaluation. It is also important to consider the following key questions:

- Is gender analysis included in the terms of reference of the evaluation team?
- Is the evaluation team gender-balanced?
- Is the evaluation team aware of the gender issues or gender and ICT issues in their country's context?
- Is there a need for gender sensitivity training for the evaluation team members to help facilitate their awareness and increase their understanding of gender issues that should be addressed in the evaluation process?

If there is no awareness of gender issues that should be addressed in the evaluation process across all evaluation team members, then there may be disagreement on the importance of collecting and analysing sex disaggregated data, including the identification of sex-disaggregated indicators. This disagreement will in turn result in a higher likelihood that gender will not be sufficiently and effectively integrated throughout the evaluation.

In addition to considerations on the composition and capacities of the evaluation team members, there are five other key considerations before conducting a gender evaluation.[28] They are:

- Organisational values
- Stakeholdership

[28] See page 77 of the GEM manual for a further elaboration on the other considerations.

- Capacities of personnel
- Understanding of gender
- Budgetary implications.

Understanding the scope of these considerations and further examining them within each specific context will help to tell if the user, the project or the organisation is ready to apply GEM—a utilisation-focused evaluation methodology with a gender lens. Lack of readiness may then mean that the project, team or organisation may require some preliminary work with other stakeholders such as funders and board members. For example: there may be a need for gender sensitisation workshops, or the presentation and discussion of data and information on why the need to appreciate the necessity to conduct an evaluation with a gender perspective. A GEM user may also realise the need to establish a set of baseline data or deploy dedicated resources over a period in order to conduct a good gender evaluation. These are all important considerations that will influence the effectiveness and scope of the evaluation.

This does not mean that GEM cannot be used if these considerations are not made or there is a lack of preparedness because when GEM is used, the following can occur:

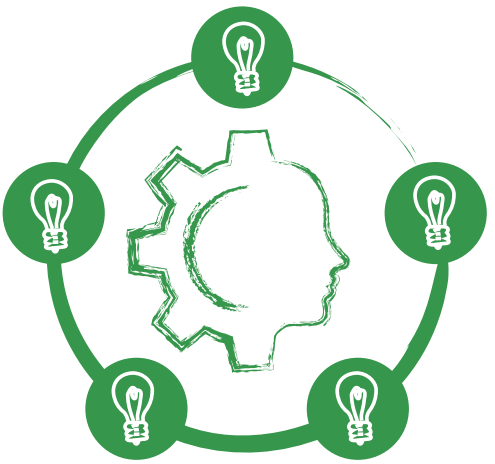
- Identification of the weakest aspects of the project where gender issues are absent
- Identification of the types of evaluation questions needed to look at vis-à-vis aspects of the project
- Unearthing of the more severe or crucial gender issues which need to be addressed
- Unearthing of important underlying causes which need to be addressed
- Identification of aspects of women's empowerment to which the project can contribute.

There are a number of organisations that have used GEM in order to obtain gender-sensitive findings that would help them advocate for a gender lens in planning, monitoring and evaluation to effect gender equality and women's empowerment.

3.1.1 Organisational values

Organisations tend to have strong working cultures of their own which are based on a set of values. Sometimes, these values continue to evolve and sometimes they remain the same over decades. The value system of the organisation is often influenced by its leadership.

Matrix 4 presents a possible organisational framework to examine organisational values. It identifies three key organisational dimensions, with each dimension having its own three areas of organisational characteristics. There are nine areas of organisational characteristics in total, and these are presented in the table below.



Matrix 4: Organisational dimensions and characteristics to examine organisational values

Organisational dimensions	Organisational characteristics		
	Mission/ mandate	**Structure**	**Human resources**
Technical dimension (The tangible parts)	I. Policies and actions	II. Tasks and responsibilities	III. Expertise
Socio-political dimension (The process or power play)	IV. Policy influence	V. Decision-making	VI Room for manoeuvre / innovation
Cultural dimension (The personality)	VII. Organisational culture	VIII. Cooperation / learning	IX. Attitude

A more detailed example of the above table is presented in Handout 1 below.

Organisational values can influence the level of understanding about the importance of gender inclusion at the conceptualisation stage of a project. They can also influence the level of readiness among implementing agencies to conceive of the importance of gender inclusion in the project life cycle, and the absence or existence of a gender policy within the project implementing institution. If the top management believes in gender equality as a core value, then it is much easier to incorporate GEM in the life cycle of the organisation's various projects. It is important to understand that GEM is not just for evaluation, but is also applicable for the life-cycle of projects, from feasibility assessments, to design, to implementation and final outcomes. A gender policy within the organisation is very useful for mainstreaming gender issues in day-to-day activities. The practice of a gender policy creates a conducive environment within it for incorporating GEM in all programmes and projects.

There were two handouts that the GEM facilitation team developed to discuss organisational values and related issues during GEM workshops. These can be distributed towards the end of the workshop for internal reflection by the participants, and they are included below.

Handout 1. An example of an organisational framework for rural ICTD projects[29]

Organisational dimensions	Organisational characteristics		
	Mission/ mandate	**Structure**	**Human resources**
Technical dimension ***The tangible parts***	**I. Policies and actions** The guiding policy and its operationalisation in action plans, strategies/ approaches, and monitoring and evaluation systems. For example: • Are your policies transparent to all? • Are monitoring and evaluation systems transparent to all? • Do meetings include everyone? • Which meetings exclude the women in your team? • Are there mechanisms for peer feedback and are women able to give feedback to their peers	**II. Tasks and responsibilities** The way people are positioned and the way tasks and responsibilities are allocated and related to each other through procedures, information and coordinating systems. For example: • Where are the women? • What roles and responsibilities do they hold? • Only in content development? • Only in training delivery? • How does this affect their multiple gender roles of productive, reproductive and community?	**III. Expertise** The number of staff and the requirements and conditions to allow them to work, such as job description, appraisal, facilities, training, etc. For example: • If women are on the technical team, what type of support and encouragement are they given? • What kind of workspace do they have? • What resources can they use without prior permission? • What further capacity-building/ training do they receive?

[29] Adapted from Verona Groverman, Jeannette D. Gurung "Part 2: Organisations and Gender" in *Gender and Organisational Change Training Manual* (Nepal: International Centre for Integrated Mountain Development, 2001), 45.

Handout 1. An example of an organisational framework for rural ICTD projects (cont'd)

Organisational dimensions	Organisational characteristics		
	Mission/ mandate	**Structure**	**Human resources**
	and superiors without having to worry about the security of their jobs?	• Are they on the technical team? • If yes, in what way? • What responsibilities and roles do they hold? • Are they only assigned tasks which are repetitive, require detailed work that is typical of clerical / secretarial and documentation-type positions? • What decisions can they make? • What information are they allowed to access?	• What new training opportunities are they able to access? • What new training opportunities are they not able to, or allowed to, access?
Socio-political dimension ***The process or power play***	**IV. Policy influence** The way and extent to which management, people from within the organisation and people from outside the organisation influence policy and the running of the organisation.	**V. Decision-making** The patterns of formal and informal decision-making processes. The way diversity and conflicts are dealt with.	**VI. Room for manoeuvre / innovation** The space provided to staff (through rewards, career possibilities, variety in working styles) or created by staff to define their work.

Handout 1. An example of an organisational framework for rural ICTD projects (cont'd)

Organisational dimensions	Organisational characteristics		
	Mission/ mandate	**Structure**	**Human resources**
	For example: • Are women part of the policy-making process within your organisation/ project team? • If yes, what levels of decision-making power are they at? • Can they influence policy decisions? • Are they able to suggest ideas or make recommendations without any male support? • Are their ideas and recommendations ever considered seriously? • Who influences the policies of the organisation and project team the most? • Do they ever consider women's interests and gender inequality issues in their policymaking? • Are they open to considering gender inequality issues? • Will they need persuading / convincing?	For example: • How are decisions made in your organisation and project team? • Does decision-making include everyone? • Are there participatory decision-making processes? • How do these processes involve women in your organisation / team? • What decisions can women make over the use of resources? • How are resources allocated to women's needs? • Do they end up with the slowest or most outdated computer, etc.?	For example: • Do rewards and career possibilities hinge on experiences and skills that women will never be able to acquire without further support and opportunities? • Does the current work environment encourage women to experiment and innovate and to initiate and try out new ideas? • How are women supported if they do proceed with trying out new ideas or new ways of doing things? • Are they ridiculed or discouraged from doing so, and yet rewards and career possibilities are given to those who show initiative, creativity and are innovative?

Handout 1. An example of an organisational framework for rural ICTD projects (cont'd)

Organisational dimensions	Organisational characteristics		
	Mission/ mandate	**Structure**	**Human resources**
Cultural dimension ***The personality***	**VII. Organisational culture** The symbols, rituals, and traditions. The norms and values underlying the running of the organisation and the behaviour of its staff. The social and economic standards within the organisation. For example: • What is the learning culture within the organisation/ project team? • How is information and, more importantly, knowledge shared? • Can women access this knowledge? • How are women involved in the information and knowledge system?	**VIII. Cooperation / learning** The way the work relations between staff are organised, such as working in teams, or networking. The way relationships with outsiders are organised. The norms and values underlying these arrangements. For example: • Are women and men encouraged to work together? • What roles do women play if they are part of a work team? • What responsibilities do they tend to hold? • Are they able to initiate and discuss new collaborations with those outside the organisation?	**IX. Attitude** The way staff feel and think about their work, the working environment and about other employees. The extent to which staff stereotype other staff. The extent to which a staff member identifies him/ herself with the dominant culture of the organisation. For example: • How are women in the organisation and on your project team viewed? • Are they ever objectified, sexually harassed? • Are they ever ridiculed for asking questions? • Are they discouraged in any way? • Do women feel part of the organisation and project team?

Handout 1. An example of an organisational framework for rural ICTD projects (cont'd)

Organisational dimensions	Organisational characteristics		
	Mission/ mandate	**Structure**	**Human resources**
Cultural dimension ***The personality***	• How are social norms that perpetuate gender inequality reinforced within this organisation or project team? • Do women always hold secretarial-type positions, support positions, treasurer positions, rather than being the right-hand (vice president, deputy director, etc.) of the one in charge? • To what extent does the organisation adopt a protectionist approach towards its female staff, which often can mean treating women like children rather than empowering them?	• Are there considerations given to assure women and their families that they are safe to work closely with their male colleagues in the field? • What kind of mechanisms or support is given to provide reassurances if women go into the field? • What social rules are women expected to follow which do not apply to men? • Do men share their skills and knowledge with their female colleagues freely? • Or is this done in an impatient manner, if done at all?	• Do they seem self-confident? • Do they seem to have high self-esteem? • Can they be outspoken yet still respected? • Do they command respect immaterial of the positions they may hold? • What do men think of women beingtheir work colleagues? • Do they prefer all team members to be men? • Do they think women should stay at home while men should be the ones who are given all the employment opportunities since many men are still unemployed? • Do male staff in the organisation refuse to work under a female supervisor or boss?

Handout 1. An example of an organisational framework for rural ICTD projects (cont'd)

Organisational dimensions	Organisational characteristics		
	Mission/ mandate	Structure	Human resources
			• Is pornography viewed during work hours by male colleagues? • Are women colleagues subjected to pornographic materials?

Handout 2 further examines eight key organisational practices through which more gender-sensitive values could be brought about within an organisation, and thus, in turn, influence the organisation's overall values. The column on "Key actions needed to change or improve on organisational practices" is meant to be completed by workshop participants or by internal stakeholders of the organisation.

Handout 2. Critical reflection exercise on organisational practices[30]

Organisational practices	Questions for critical reflection from a gender perspective	Key actions needed to change or improve on organisational practices
Practice 1: Prospecting for new ideas, opportunities and resources	• Are women encouraged to do this? • Can they play a leading role in initiating new ideas, opportunities and resources? • Can women take the lead in forging new deals, initiating collaborative opportunities, identifying new boundary partners, etc.?	

[30] Developed based on Outcome Mapping's Design Worksheet 4 on page 74 and the Gender Evaluation Methodology's "Learning for change" on pages 19 to 22.

Handout 2. Critical reflection exercise on organisational practices (cont'd)

Organisational practices	Questions for critical reflection from a gender perspective	Key actions needed to change or improve on organisational practices
Practice 2: Seeking feedback from key informants	• What feedback have you sought from key informants? • Does it include a gender perspective or analysis of the situation/context and your area of work? • If your situational analysis did not include a gender perspective, what can you do to gain such insight? • Do your key informants continue to play an advisory role within your project? • Are gender experts part of your project team in any way? • If yes, do they play advisory roles? Were they among your key informants?	
Practice 3: Obtaining the support of your next highest power	• Have you included the need to address gender inequality issues with your next highest power? • Is further persuasion needed? • What else would help convince them of the importance of addressing gender inequality issues? • How are you able to influence your next highest power? • Are there participatory decision-making processes in place that include women and allow for women's perspectives?	

Handout 2. Critical reflection exercise on organisational practices (cont'd)

Organisational practices	Questions for critical reflection from a gender perspective	Key actions needed to change or improve on organisational practices
Practice 4: Assessing and (re)designing products, services, systems, and procedures	• How ready are you and your team members to go back and redesign your project (which can include its products, services, systems and procedures)? • How can your current strategies change to be more effective in addressing gender inequality issues? • Are you willing to change these strategies? • Where are women in terms of the roles they play in your procedures and systems? • Are they decision-makers? • What level of decisions are they allowed to make? • Can women be supported to play higher-level roles? • What changes can you put in place to help make this happen?	
Practice 5: Checking up on those already served to add value	• What is the boundary partners' own understanding of gender and ICT issues? • How committed are they to addressing gender inequality issues? • Can you provide support? • Are there other strategies that you can adopt (causal, persuasive, supportive) that can help them do this better? • How can your current strategies change to be more effective in adding value to the work of your boundary partners?	

Handout 2. Critical reflection exercise on organisational practices (cont'd)

Organisational practices	Questions for critical reflection from a gender perspective	Key actions needed to change or improve on organisational practices
Practice 6: Sharing your wisdom with the world	• Are you transparent in also sharing your lessons learnt, and what did not work? • Are you honest in elaborating how you addressed gender inequality issues, if at all? • Are you explicit about the challenges and problems you faced and which of these you could not overcome and why, so that others can learn from your experience?	
Practice 7: Experimenting to remain innovative	• How are women in your team encouraged to experiment? • How are they supported? • How are your boundary partners encouraged to experiment in addressing gender inequality issues? • How are they supported?	
Practice 8: Engaging in organisational reflection	• How are gender inequality issues included in staff meetings and discussions? • Are they raised at all? • Is organisational reflection limited to the immediate work and outputs (quantitative aspects) and not to the processes of "how" and "why" these may or may not work (qualitative aspects)? • Do reflections include the differences in how women and men are responding to your programme strategies and the importance of finding out why?	

Handout 2. Critical reflection exercise on organisational practices (cont'd)

Organisational practices	Questions for critical reflection from a gender perspective	Key actions needed to change or improve on organisational practices
	• Is evaluation an important part of your planning, design and re-design, and monitoring processes? • What kind of learning culture does your organisation have? • Is it a "learning for change" culture? • Are there biases in terms of which reflections get considered and which do not? • To what extent does organisational change indicate the willingness to make changes within oneself?	

3.1.2 Stakeholdership

Depending on the organisation or project, stakeholders can range from the organisation's board members to the community. They can include both internal and external stakeholders such as staff, management, community organisations, local government units, sponsors, funding agencies, government agencies, internet service providers, media, development organisations, educators and researchers, etc. Your stakeholders are often able to influence your decision-making and direction as well as the organisation's commitment to the "learning for change" ethic.[31] For example: a governmental organisation with its range of stakeholders may have a very different attitude towards "learning for change" compared to a private sector enterprise.

A gender evaluation, especially one that is utilisation-focused, cannot be effectively conducted if there is no commitment by key stakeholders to incorporating the evaluation findings into the organisation's work, practices and policies. This means ensuring the understanding of gender issues by the critical stakeholders at the field level as well.

For example: the project team may invite or visit the male household head to get into their good books so that the male household head will become more supportive of their female spouse in project activities. As the support and involvement of critical stakeholders such as the male household head is important for the success of a project, it is important to involve them at the phase of project design so that they can understand the project outcome and provide necessary support or, at minimum, not become obstacles to the project's implementation. Conducting gender sensitisation workshops for stakeholders to help them understand the gender issues within ICTs could be a necessary step to making stakeholders more open and appreciative of the importance of conducting

[31] "Learning for change" is the overall framework of GEM and is described in the GEM manual on pages 19–21.

a gender evaluation. Workshops for those who want to use GEM also serve as gender sensitisation workshops as participants are brought through a process of identifying and understanding gender concepts and how these play out in relation to gender and ICT issues, and how these issues can affect planned outcomes.

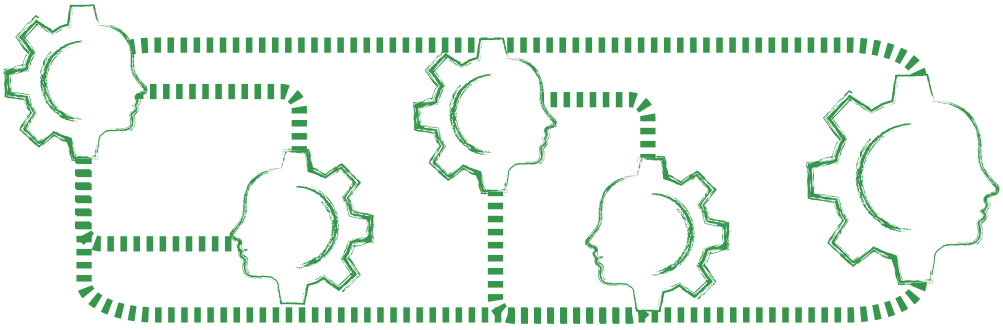
3.1.3 Capacities of personnel

Gender analytical capacities of staff can always be complemented or strengthened by additional training or by bringing in a resource person to conduct gender sensitisation. Staff who are not part of the evaluation team can sometimes lack motivation to support the conduct of a gender evaluation if they mistakenly see that the evaluation is only going to examine how women benefit from their work. There is a tendency to forget that a gender evaluation is still about evaluation but conducted with a gender lens. This requires identifying the key evaluation questions[32] to serve the objectives or purpose (intended use or uses)[33] of the evaluation, which should integrate differentiating how women and men benefited from the project or work carried out. The following are some of the typical problems that an organisation or project may face:

- Skilled women project leaders, project personnel are not readily available at head-office level as well as at field level (one has to invest in developing female human resources before launching a project on the ground, especially if the culture restricts women's mobility in public spaces)
- Challenges faced at home by the female personnel both at head office level and field level
- Attitude of male colleagues within a team both at the head office level and field level
- Lack of a gender perspective and appreciation of gender issues in evaluation throughout the project life cycle.

As readily available women leaders for project management/implementation are scarce, it is important to recruit fresh female graduates and to build their capacity to lead or implement projects. This is sometimes a painful process, and it is always a risk that when staff are trained, male or female, they will leave for better employment prospects.

The typical problems described above are usually strongly linked to and influenced by socially defined and expected gender roles and responsibilities. The reverse can and does happen because men in some societies are considered physically stronger and so are expected to continue to play a major and active role, for example: in the rural areas in relation to livestock rearing and herding or farming, without opportunities for further studies that would expand their potential. What is important when examining capacities of personnel and the relational advantaged or



[32] GEM identifies this as step 3 of the evaluation methodology, and is described on pages 84–87 of the GEM manual.
[33] This is step 1 of GEM and is described on pages 72–77 of the GEM manual.

disadvantaged position of female staff vis-à-vis male staff, is to also look at whether there is oppression and discrimination of one over the other, whether there is subjugation and coercion by one of another, and whether this subjugation or coercion is informed by a belief and/or domination system.[34]

An implementing organisation can introduce a mentoring programme for all colleagues so that the relationship between male and female colleagues becomes more respectful and considerate, promoting better teamwork in pairs. Debriefing on sexual harassment can also be important, both for the field level and head office level staff. The management can identify a list of benefits, why the project team(s) should use GEM in the life cycle of all projects of the organisation. The management can organise workshops on GEM at the beginning of a project so that the project team can learn and apply GEM in designing and developing the evaluation plan of a project.

3.1.4 Understanding of gender

Gender can be a difficult concept to grasp and so it is important to find ways of communicating the concept through the lived realities of your audience, be they board members or the community or other stakeholders. Most organisations that work with communities never begin with the concepts and theories. Many begin to explore gender through existing needs and the differences in needs between women and men, and then relating these to the roles and responsibilities women and men play in that community or locality.

In most societies, the terms "gender" and "sex" are interchangeable. This idea has become so common, particularly in western societies, that it is rarely questioned. Yet biological sex and gender are different; gender is not inherently connected to one's physical anatomy.

Gender is all around. It is actually taught to people, from the moment they are born. Gender expectations and messages bombard our societies constantly. Gendered interaction between parent and child begins as soon as the sex of the baby is known. In short, gender is a socially constructed concept and like other social constructs, gender is closely monitored by society. Accepted social gender roles and expectations are so entrenched in culture that most people cannot imagine any other way. As a result, individuals fitting neatly into these expectations rarely if ever question what gender really means. Most never have to, because the system has worked for them.

Over the past 25 years, the sociology of women has given way to the sociology of gender and understanding women in relation to men in terms of what they were, are or can be. Today, there is an understanding that there are "femininities" and "masculinities" which are more multiple than singular expressions of gender.

Lessons in the development sector have increasingly begun to relate gender in connection with other basis of differentiation in society based on religion, caste, class, sexual orientation, age, or sex, all of which come into existence but are always subject to change. With that comes the conclusion that gender is a cross cutting theme across all religious, ethnic, sex, age, class and caste barriers placed by society.

The term "power" is often used when describing gender differences. "Power" is a broad concept that describes the ability or freedom of individuals to make decisions and behave as they choose. It also can describe a person's access to resources and ability to control them. When the term "power" is associated with gender, it usually refers to inequities between men and women.[35]

[34] Longwe proposes a lens for analysing a gender issue by providing a framework to examine the underlying causes of a gender issue. It is these underlying causes that should inform a project's or organisation's decision-making and actions, and not merely what is most visible. For more information, see pages 35–36 of the GEM manual.

[35] Megan Drennan, et al. "New perspectives on men's participation" Population Reports 26, 3 (1998) http://info.k4health.org/pr/j46/j46chap4_1.shtml

Women's gender roles do give them some power. Usually, however, women's power is much more limited in scope than men's. Like a man's power, a woman's power is influenced by such factors as her culture, age, income, and education. Some studies have found that women's power increases as their status in the community improves.

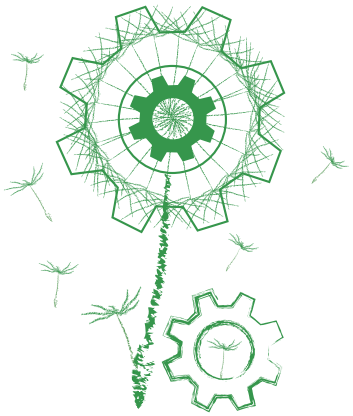
3.1.5 Budgetary implications

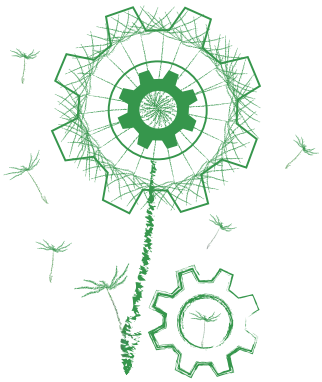
The use of GEM has budgetary implications, as it includes organising workshops, inviting trainers or facilitators, field visits, dedicating time to create tools for gender awareness, surveys and questionnaires to gather information with a gender perspective, training local people, sensitising the community, and more.

It is important to take into account possible expenses, including expenses that might be hidden at the beginning but that could become a burden for the organisation in the long run if they were not considered at the very start. The following are only examples of some of the possible expenses that can easily be overlooked if planning for the evaluation is not sufficiently detailed:

- Field visits: travel, time dedicated, phone calls, internet use, etc.
- Honorariums for gender expert and gender facilitators
- Per diems for volunteers
- Purchase of tools to use in workshops and field work: MP3 recorders, LCD projectors, netbooks, digital cameras, etc.
- Organising gender awareness or gender sensitisation workshops, and GEM workshops
- Creation of tools for workshops
- Creation of tools for evaluation: surveys, questionnaires, guides for focus groups discussions, etc.
- Time dedicated to team work, research for resources, field work, gathering and analysing data, reviewing interviews and debriefing
- Networking with other organisations, and possibly telecentres or e-community centres and other ICT initiatives in the community or nearby region
- Meetings with project beneficiaries and the wider community (including those not reached by the project) to discuss and involve them in evaluation plans at the beginning of the process and share results at the end of it
- Special activities in the community to share information, resources and lessons
- Budgeting for the changes that the evaluation process creates (for example: budgeting for use of the evaluation findings).

SECTION 4:
USING THE GENDER EVALUATION METHODOLOGY IN RURAL ICTD PROJECTS





SECTION 4:
USING THE GENDER EVALUATION METHODOLOGY IN RURAL ICTD PROJECTS

The main objective of this section is to provide a sufficient range of experiences from which rural ICTD practitioners can draw the necessary lessons in applying GEM. This section presents illustrative examples from three GEM practitioners' experiences. Two of the GEM practitioners had used GEM to evaluate their own projects (Nigeria and Bangladesh) while the third had used GEM to evaluate a rural e-governance scheme, a state government's programme, in India. This section is not meant to be an exhaustive representation of examples of the various kinds of rural ICTD projects that can be in existence, but the examples cover a broad range of circumstances and should be useful in figuring out how to apply each GEM step over the lifetime of a project.

4.1 Phase 1: Integrating gender analysis

See GEM manual, pages 71–106.

The purpose of this phase is to ensure the integration of a focus on gender equality and women's empowerment in planning and evaluation of ICT initiatives. It contains the first four steps of GEM and lays down the groundwork for planning and implementing a gender evaluation of an ICT-based initiative. This phase necessitates arriving at an understanding of basic concepts of gender and ICTs and sets the scope, purpose and limits of the evaluation.

4.1.1 Step 1: Defining intended use and intended users

See GEM manual, pages 72–77.

In practice, it is often easier to think of intended use(s) of the evaluation findings before thinking of your intended users. This is fine as a starting point of the process but it is important to always go back to the intended users to obtain a consensus on the intended use or uses of the evaluation findings. This is because it is really the intended users and their use of the evaluation findings that will ensure that "learning for change" occurs.

When we talk of **intended use** of evaluation results, we refer to how specific and identified people or institutions apply evaluation findings and experiences in the real world. When we start an evaluation plan, we need to keep in mind who intends to use the evaluation findings (intended users) and how these people or institutions intend to use the results (intended use). The intended use or uses then help to define the evaluation objectives (purpose of the evaluation). Defining an intended use need not only be about the use of the evaluation findings or the use of the final results and lessons learned, but it can also be about the use of the evaluation process or what is called process use—how the evaluation process can contribute to learning and refinement of a project's implementation.

Some examples of process use includes strengthening a feedback process, building a culture that is more open to learning (or what might be called "learning to learn"); developing networks; creating shared understandings; strengthening the project implementation; and boosting morale. Process use recognises that learning can and does take place during the evaluation process. GEM emphasises both process use and findings use because GEM recognises the need for the evaluation to evolve as learning occurs, and for learning to occur as an organisation or project team's evaluative thinking develops.

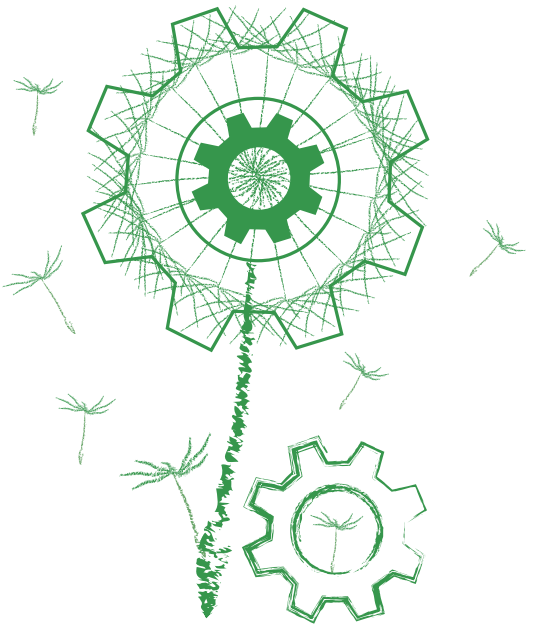
Although gender is a cross-cutting issue that affects all project stakeholders and all aspects of a project activity including evaluation, not all project stakeholders are intended users of an evaluation. When determining the **intended users** of the evaluation, think of project stakeholders who are crucial when examining gender and ICT issues, and who are committed to using the evaluation findings to bring about the needed change. These stakeholders can be:

- **Internal to the project,** like project executors, staff and management
- **External to the project,** like project beneficiaries (depending on the extent to which community ownership over the project and community decision-making in the design, implementation and evaluation of the project has been facilitated).

Stakeholders can also be:

- **Direct stakeholders,** who are directly involved in the project's activities
- **Indirect stakeholders,** who have not been directly involved in the project's activities but who benefit or are affected by it in some way.

Take note that not all stakeholders will have an intended use of the evaluation results. This is normal. There is a difference between being interested in the findings or just wanting to know, and being committed to actually take action to incorporate the findings into one's work, next steps of action or decision-making. Only the latter would be intended users.



Worksheet to define intended users and intended use(s) of the evaluation (fill in the gaps)

Name of project	
Intended user	**Intended use**
Internal	
Project staff	
Project management	
Board of directors (of implementing organisation)	
External	
Users / project beneficiaries	
Non-users / non-project beneficiaries (those not reached by rural ICTD project's services)	
Community organisations	
Local government	
Service providers	
Other organisational partners	
Funding agencies	
Media (community radio stations, local bulletins, newspapers, etc.)	
ICTD researchers	
Rural ICTD practitioners	

The above worksheet is not exhaustive. It is important to add any other stakeholders, according to the project's objectives and needs. Be as specific as possible when identifying an intended user. So something general like "media" or "service providers" should ideally be avoided. If only one of the service providers will use the evaluation results, then name that service provider. It is best to also identify who exactly within a local government authority would use the evaluation results. Sometimes, naming a department or agency does work, but if the project is reliant on the head of that department or agency to incorporate the evaluation findings into their work and decision-making, then identify this intended user by name as sometimes government personnel are relocated or promoted and this can affect the intended use by this intended user. Do the same for other stakeholders if they will be the intended users of the evaluation findings.

"Intended use" is about the use of the evaluation results or the use of the evaluation process. When evaluating a project that uses ICTs to help enhance the productivity and marketing skills of women farmers, defining the intended use may not be so simple. Here is a typical first attempt.

Defining intended use (example of a first attempt)	Questions to ask
Determine the capacity of women farmers to defend their interests through the use of ICTs	What will you do when you have this information? What action or change is the information supposed to help bring about?
Determine the level of leadership of women farmers through the use of ICTs	What will you do when you have this information? What action or change is the information supposed to help bring about? This could also be translated into a process use. For example: "build the level of leadership of women farmers by ensuring collective ownership over the evaluation process".

The above two examples of a first attempt at drafting an intended use or uses for the findings or process of an evaluation are not intended uses. These two examples define what you want to find out and could be stated as the objectives of the evaluation, which will, in turn, help define the evaluation questions and probably some of the survey or interview questions. It is possible to set about to obtain this information in both qualitative and quantitative data depending on the gender and ICT indicators that have been identified. Do remember though that intended use(s) determine the evaluation objectives. Do not work out your intended use(s) of the evaluation results in the reverse manner, and do not begin planning the conduct of the gender evaluation by determining the evaluation objectives. Begin by identifying intended users and intended use(s). Intended uses may or may not indicate what would be the "learning for change" that the intended users will undergo. "Learning for change" usually results from the process and experiences of conducting the evaluation (process use) as well as the implications of the evaluation findings for the project, programme, organisation or team.

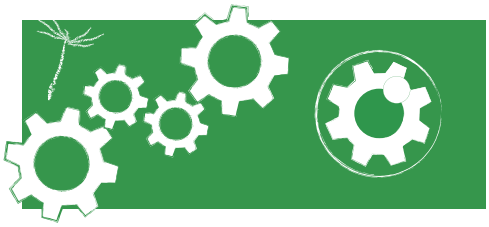
The following are three examples from field experiences of the GEM practitioners to help illustrate how important it is to define intended users and intended use(s).

Example 5: Intended users and intended uses of the evaluation of Fantsuam Foundation's ZittNet, Nigeria

Name of the initiative	• Gender analysis of Nigeria's first Community Wireless Network, ZittNet
Objectives of the project	• To increase female uptake of wireless services at ZittNet by 30% within 12 months
Expected outcomes	• Strategy to increase women's uptake of wireless services developed • Gender transformative policies developed for ZittNet, and incorporated into revised Strategic Planning • A "lessons learnt" workshop organised (communication strategy) • Explore the provision of financial and technical assistance to women to facilitate their access to wireless services by providing microfinance support, training and mentoring (critical reflection, learning for change) • Write an article on gender equity and usage of ZittNet's services (communication strategy) • Determine complementarities of ZittNet to Nigeria's national ICT policy (communication strategy) • Promote ZittNet as a model for national policy advocacy for engendering of ICT policy processes (communication strategy)
Intended users	• Wireless subscribers (internal) • Potential female subscribers (internal, not reached) • Fantsuam Academy (internal) • Government agencies (external) • ZittNet staff (internal) • Funding agencies (external)
Intended use	• To develop a feasible strategy to increase women's uptake of ZittNet's wireless services

What can be learned from this example?

Note that there is only one intended use described although there are six intended users. This means that there is consensus between all six intended users on the use of the evaluation findings, and the intended use clearly states how or to what purpose the evaluation findings will be used. These six are already stakeholders of ZittNet who continue to be partners with Fantsuam Academy and continue to play a role in the project. Fantsuam Foundation went as far as describing the components or outcomes needed to support and strengthen their "learning for change" dynamic. This included determining components of their communication strategy to help communicate their evaluation findings and lessons learnt.



Example 6: Intended users and intended uses of the evaluation of D.Net's Computer Literacy Programme (CLP)

At the initial stage of drafting out their evaluation plan, D.Net developed the following as their intended users and intended uses.

Stakeholder	Intended user	Intended use
Internal	• Staff of the programme • D.Net management.	• Change project strategy and action plan to incorporate the findings of the evaluation results.
Community (external)	• Computer Literacy Centre (CLC) operators • Community organisations.	• Incorporate the evaluation results in project operations.
Investors (external)	• Non-resident Bangladeshis • National corporate bodies • Donor agencies • Government agencies.	• Be willing to invest and raise funds to support the expansion of this programme.
Interested parties (external)	• Bangladesh Telecentre Network members • Other organisations willing to replicate the model.	• Promote this model for replication and identify or draw out policy issues to be addressed for such interventions.
General public (external)	• Media • Development organisations • Education and skills development institutions.	• Create awareness about the issue and incorporate this programme into their core activities.

After consultation with all of the intended users and relevant stakeholders, D.Net's identification of their intended users and intended uses is shown below.

Stakeholder	Intended user	Intended use
Internal	• Staff of the programme • D.Net management.	• To develop a gender sensitisation workshop and programme with the project operation stakeholders • To write articles about the gender perspective of the project and share the evaluation results with investors of the CLP through conference calls and email interactions in order to motivate them to invest more in girls schools to make the project relevant for the really underprivileged.
Internal	• D.Net management • Project team • CLC operators.	• Design suitable platforms to create awareness on gender issues among the teachers and parents.
External (investors in the CLP)	• Non-resident Bangladeshis • National corporate bodies that are already interested in gender issues.	• To persuade and effect a positive response to the evaluation findings and invest more in girls schools under the CLP.

What can be learned from this example?

Note that in contrast to the Fantsuam Foundation, D.Net identified a much wider range of intended users of the evaluation findings of their CLP, which included groups from the general public. These are groups that D.Net can influence, and that work with them on various other projects as well. However, on further consultation, D.Net had to narrow down their list of intended users with very clear and achievable actions or decisions to be taken and under the direct control of their intended users.[36] The process of defining intended users and intended use(s) helps organisations and rural ICTD project teams to set the scope and limits to an evaluation, but which will remain relevant to their needs and useful to implement improvements.

[36] The GEM manual presents key questions that one could ask of intended users to establish an evaluation's intended influence on forthcoming decisions. See page 75 of the GEM manual.

Example 7: Intended users and intended uses of the evaluation of Chhattisgarh's *e-Gram Suraj* Scheme (rural e-governance scheme)

Stakeholder	Intended user	Intended use
Interested parties (external)	• Department of Political Science, Guru Ghasidas University, Bilaspur, Chhattisgarh, India • Women's Studies and Development Centre, Guru Ghasidas University, Bilaspur, Chhattisgarh, India.	• Design a workshop to create awareness on gender issues in rural e-governance among various stakeholders including government officers, NGOs, and academia • Write articles for newspapers and give radio talks to create awareness among stakeholders • Write a reflective piece on the experience of using GEM • Prepare a research report to be available and accessible from the university library for use as a reference for further research.

What can be learned from this example?

This example is interesting and different because in the final listing of intended uses and intended users, there are no internal intended users, only external. This is because the gender evaluation of the *e-gram suraj* (rural e-governance) scheme of Chhattisgarh was conducted by external parties who are interested in using the evaluation findings to bring about new and increased awareness of gender issues in rural e-governance and to also be a resource for other researches. Because these are external intended users, the implications for "learning for change" and for Step 7 of GEM, "Incorporating Learning into the Work" is therefore different and will not necessarily directly affect change from within the *e-gram suraj* scheme in Chhattisgarh. Because the Women's Studies and Development Centre of Guru Ghasidas University Bilaspur, Chhattisgarh is also engaged in policy advocacy, the "learning for change" would occur in its own advocacy and research training work (see section 4.3.1 for further details).

4.1.2 Step 2: Identifying gender and ICT issues

See GEM manual, pages 78–83.

It is important to review the project or programme objectives before designing an evaluation to uncover the immediate outcomes or medium to long-term effects of your project or programme. This is the process of GEM and it is Step 2 of GEM that necessitates the probing of gender issues within the project or initiative throughout its life cycle. The situational analysis is the situation being addressed by the project concerned and therefore a thorough analysis of the context and a thorough understanding of the project's theory of change are important.

Example 8: The Computer Learning Programme of D.Net

The Computer Learning Programme of D.Net began its operations in 2004. It is a programme sponsored by Bangladeshi expatriates, an organisation called Volunteers Association for Bangladesh, New Jersey (VAB-NJ).[37] The CLP was designed based on the comparative situational analysis described in Table 3.

Table 3: A comparative situational analysis between urban and rural students for D.Net's CLP

Urban students	Rural students
• Urban students have computer labs in the school or personal computers at home so studying computer science in school is easier, in that they are better able to access information and have more opportunities and access to the computer to practise, and so, the process of learning about the computer and how to use the computer also becomes more interesting.	• Studying computer science is difficult and boring because rural students have to read and learn from their class textbooks and are only able to see photographs of a computer. • Rural students have no access or opportunities to use the computer and so are unable to practise what they learn.
• Most urban schools have computer science as a subject. • Private urban schools establish their own computer labs and appoint teachers and technicians for the lab so that they can attract more students to enrol in their schools.	• Most rural schools do not have computer science as a course in their schools due to lack of computers and/or computer teachers. • Sometimes, private rural schools intentionally avoid offering computer science as a subject because they have to buy computers and hire and make separate and additional payments to teachers of this subject.
• Urban schools have internet connections and students are able to obtain current information on educational opportunities and potential careers and career opportunities from websites.	• Rural students do not have opportunities to get the latest information on educational opportunities and potential careers and career opportunities from websites due to the absence of, or poor, internet connection.
• Urban schools emphasise the importance of computer skills, almost as a prerequisite to having a better job. • Urban students have opportunities for learning about the computer and how to use the computer, so they are better able to get better paying jobs compared to rural students.	• Rural students fail to get better paying jobs due to lack of computer skills despite having similar educational achievements and other qualifications.

[37] For more information about the Volunteers Association for Bangladesh, New Jersey, see www.vabonline.org/vabnj

After two years of implementing the CLP, D.Net conducted an evaluation in 2006 to see what were the immediate outcomes and short-term impact achieved through the programme.[38] When conducting this evaluation, the team interviewed teachers as well as students to understand their transformation and behavioural change after enrolling in the CLP. Key highlights of the evaluation study are given below:

For students:

- **Access:** CLC-equipped schools are the venues of access to computers for the vast majority of students
- **Familiarity:** Before taking the CLP course, 30% of the students felt that they were familiar or very familiar with computers. The rest felt they were somewhat familiar, vaguely familiar, or not familiar at all. After exposure to the course (those currently taking or having already taken it), 86% felt that they were familiar or very familiar with computers. The rest felt they were somewhat familiar, vaguely familiar, or not familiar at all.
- **Skills-set development:** The proportion of students who had exposure to the CLP course who could perform basic word-processing, spreadsheet and general computer operation functions far outstripped the proportion of students from the control schools who could do the same. The proportion of students from schools with CLCs who could perform internet-related and advanced software functions were also higher compared to students from schools without CLCs.
- **Reaction to computers:** More than half the students described their reaction to computers by using the adjectives "amazed", "great", "pleased" and "self-conscious". More than a third also used the adjectives "eager" and "excited". Between 5% and 15% of the students also used the adjectives "annoyed", "awkward", "nervous" and "upset".
- **Evaluation of teaching:** 19% of the CLP students felt that the teachers could have done a better job, and 12% felt that they did not learn much from the CLP course. Virtually all of them felt that the teachers helped them understand, made the course interesting and fun, and were mostly encouraging.
- **Working with each other and peer-teaching:** 79% of the CLP students helped others, 70% learned from others, and 81% enjoyed working in pairs
- **Information-sharing/talking about CLP:** 96% of the students reportedly talked about the CLP course with their peers
- **Intention to take the Secondary School Certificate (SSC) course in computers, and impact of CLC:** 46% of the CLP students feel that the presence of the CLC has greatly affected their decision to take the SSC course in computers, while 27% feel that it has done so to a certain degree. 27% feel that it has had no impact at all on their decision.
- **Limitations:** 33% of the students who had already taken the CLP course and 52% of those who are currently taking it felt that there are limitations to the course. Limitations mentioned include: the short duration of the course and each class, lack of time to practise, overcrowded classes, inexperienced teachers, lack of access to the internet, etc.

[38] The report by Ashirul Amin is available at: http://www.clp.net.bd/?page_id=77

For teachers:

- **Reaction to computers:** Half or more of the teachers described students' reactions to computers as "amazed", "great", "pleased" and "self-conscious", 30% described them to be "eager", and 15%, as "excited". None of the other adjectives were selected.
- **Effect on student behaviour:** Almost all the teachers agreed somewhat or strongly with the proposition that the students looked more confident, comfortable and enthusiastic in a computer environment as a result of spending time in the CLC
- **Effect on learning math, Bangla and English:** Virtually all the teachers either "agreed strongly" or "agreed somewhat" that there is a positive effect of the CLP course on the students' proficiency in math, Bangla and English
- **Intention to take the SSC course in computers, and impact of CLC:** Fifteen teachers noted that the presence of the CLC greatly helped the students in their preparation for the SSC examination in computers, and three noted that it affected them somewhat. Thirteen teachers noted that the CLP course helped the students prepare for the SSC examination "a lot", and two of them noted that it helped them "somewhat".

For parents

- **Guardian computer familiarity:** Six guardians said they were not familiar with computers at all, fifteen were vaguely familiar, seventeen were somewhat familiar, seven were familiar and three were very familiar
- **Information-sharing:** 73% of the guardians said that the student often talked about the course at home, 25% of them said that they talked about it "some of the time", and 2% said that they never talked about the course at home
- **Effect on student behaviour:** Almost all the guardians agreed somewhat or strongly with the proposition that the students looked more confident, comfortable and enthusiastic in a computer environment as a result of spending time in the CLC. A third of them agreed strongly or somewhat that the students' self-confidence had increased in a computer environment as a result of spending time in the CLC, while three quarters of them agreed strongly or somewhat with that proposition.
- **Limitations:** 27% of the guardians feel that there are limitations to the CLP course as it is run now, while 71% felt that there are no limitations. Limitations mentioned included the limited infrastructure of the CLC, the CLP course itself, and miscellaneous other associated factors.

The first evaluation of the CLP gave a comprehensive picture of the immediate outcomes and short-term impact of the programme on the ground. However, the evaluation team found that the responses received from the interviewees were somehow different while receiving responses from male and female students separately. As the evaluation objective of the research was not to look deeper into the gender sensitivity design and implementation of the CLP as an intervention to reduce poverty, the key findings could not quite capture these

differentials though the team members noted that they existed. Thus, it was important for D.Net to examine the CLP more closely in order to unearth these gender differentials. D.Net used GEM to do this between 2007 and 2009.

What can be learned from the example above?

D.Net's analysis of the situation between urban students and rural students (Table 3) had yet to provide a gender perspective. Because of the initial evaluation in 2006, D.Net could pick up on some of the gender issues that rural girl students faced in Bangladesh, based on feedback from the evaluation team. These observations were:

- Female students had less familiarity with ICT tools
- Female student had less interest to attend the computer course
- Female students were not allowed to come to the CLC to attend the computer training classes
- Family members (particularly male family members) did not allow female teachers to go to Dhaka to attend the CLP teacher training
- Female teachers faced problems (sociocultural) to continue with the CLP computer training classes.

This was the purpose of D.Net conducting a gender evaluation of its CLP, to unearth the gender and ICT issues that female students faced, particularly female students in rural areas since the CLP is a programme targeted at rural schools and underprivileged students. D.Net needed to unearth the gender and ICT issues faced by rural girls in order to be better able to convince the CLP sponsors that rural girls' schools had to be served by the CLP. As explained in D.Net's story of the experience of conducting the gender evaluation (see Box 1), sponsors of the CLP would be inclined to choose their own former schools rather than allow D.Net to make these decisions on their behalf. Since most of the sponsors were male Bangladeshi expats residing in the USA, the schools chosen by the sponsors were primarily boys schools. As a result of using GEM, D.Net was able to revisit the situational analysis of the local contexts where the CLP was being conducted, and could incorporate a gender perspective (Table 4). D.Net went further when revisiting the situational analysis by identifying to what extent CLP can feasibly address the problems identified and how.

Table 4: Situational analysis for D.Net's CLP with a gender perspective

Definition of poverty reduction	Scope to address poverty reduction through CLP	Gender issues and implications
Basic computer literacy is mandatory in almost all jobs but the level of access to ICTs for students (both male and female) students in rural schools is very low.	*Address access issues by:* • Providing access to computers by setting up computer labs in remote schools • Developing and providing relevant content in local language • Increasing familiarity and knowledge on the different uses and applications of ICT • Influencing career decisions of students through the provision of the CLP classes/course. After completing the training, students are more inclined to study computer engineering, computer science, etc. This will help them be more qualified and so have better opportunities of getting good jobs in the current job market both nationally and internationally.	• Girls often need separate spaces and time to learn how to use ICTs • Girls and boys tend to use ICTs differently for different purposes, and the motivation to learn is different • Parents and teachers may feel that only boys should learn ICT and girls should learn skills that are more relevant to being a good homemaker • Girls tend to learn better in an environment that encourages peer learning and a process of self-confidence building, where all are considered equal, and not a top-down approach or teacher-student approach • Girls may end up using older computers or "computers that do not work so well" compared to boys who are not shy about rushing for the best facilities and equipment • Boys' career decisions are often their own. They tend to want to be doctors or engineers. Girls' career decisions tend to be what is expected of them by society

Table 4: Situational analysis for D.Net's CLP with a gender perspective (cont'd)

Definition of poverty reduction	Scope to address poverty reduction through CLP	Gender issues and implications
		or based on sociocultural barriers they faced. They often only want to be teachers or are influenced by the family's wishes. Parents tend to think that boys should go or can go for technical-type jobs while girls are incapable of doing these jobs.
Rural and marginalised people do not have access, or have less access to, ICTs and this creates a digital divide between rural and urban students and the wider community.	*Reduce the digital divide by:* • Selecting project locations in under-developed areas where students and community people never thought about having computers in their areas or schools • Providing internet facilities so that rural underprivileged students and community of Bangladesh are better able to become part of the information society • Providing basic computer training to rural youth who are currently underserved.	• Girls may not have an opportunity to take computer training which is often located far from home. Boys have that opportunity. • Parents wish to enrol their daughters in computer training courses provided by the school • Girls face a lot of social barriers that prevent them from having timely access to information they need. On the other hand, boys have lots of opportunities to get information. Girls can access information they need by browsing various websites. • The digital divide exists between girls and boys. The CLP training will help to reduce this divide by introducing computer and internet to the girls.

Table 4: Situational analysis for D.Net's CLP with a gender perspective (cont'd)

Definition of poverty reduction	Scope to address poverty reduction through CLP	Gender issues and implications
Familiarity with the use of ICT will help both boys and girls overcome their fears of technology and to increase their levels of confidence of experimental learning in the "after school" environment—to be able to tap into their own potential.	*Address knowledge issues by:* • Providing ICT skills • Imparting knowledge on how a computer actually works • Encouraging experimentation and exploration with ICT.	• Levels of self-confidence and willingness to experiment and to fail or succeed can differ greatly between boys and girls • Boys are generally encouraged to take leadership roles, and this can mean not being afraid to try and not being afraid to fail. Girls are often socially conditioned to be followers and supporters. • Teachers and parents may be reinforcing this social conditioning through their approaches with the students/children.
Nurturing and inculcating information-seeking and knowledge-seeking behaviour is important so that situations of helplessness can be addressed to a certain extent.	*Encourage information and knowledge-seeking behaviour by:* • Providing appropriately designed ICT-type challenges for students (for example: knowledge creation, website development, etc.) • Encouraging students to seek out solutions for themselves independently or with a group of peers.	• Girls' and boys' participation and leadership roles can differ depending on different obstructing or facilitating factors which have to be identified • Society and family always want solutions from boys for their problems and love to see girls depending on parents and male members of family for solutions.

Table 4: Situational analysis for D.Net's CLP with a gender perspective (cont'd)

Definition of poverty reduction	Scope to address poverty reduction through CLP	Gender issues and implications
Development of IT skills is important for creating income opportunities.	*Create income opportunities by:* • Helping students develop their IT skills. Some students may start their own businesses, some may get jobs in the government or with NGOs. It helps them to be economically solvent. • Providing access to information over the internet through the CLCs, where community people and students can get training and search websites for jobs and livelihood-related information. This helps them to get information at a more affordable cost and by using this information, they can earn money. It has a long-term effect on poverty alleviation.	• Boys are getting jobs and starting their own businesses but girls could not due to the social and cultural barriers they face from family and the community • Rural women are more underprivileged than rural men. From the CLCs, they will be able to get livelihood information.
It is not just the provision of education, but quality education that makes a big difference in children's lives. The relationship between quality education and poverty is quite clear.	*Enhance the quality of education provided by rural schools by:* • Enhancing the skill-sets of rural students with IT skills and how to seek information over the internet.	• Girls may not use the computer or the internet due to their shyness or due to the mindset that technology is only for boys.

Table 4: Situational analysis for D.Net's CLP with a gender perspective (cont'd)

Definition of poverty reduction	Scope to address poverty reduction through CLP	Gender issues and implications
Educated people have higher earning potential and are able to improve the quality of their lives, which means they are less likely to be marginalised within society at large.	Students of the CLCs listed browsing the internet in school and using the Jeeon CD[39] to write up their assignments for science, English, computer science, agricultural science, etc. Students are able to communicate with other students in Bangladesh and abroad. They can download any information they need for their personal and education purpose • Broadening the range of available options for employment and business opportunities. Education empowers a person and it helps them to become more proactive, gain control over their lives, and to readily explore various options and risks.	Teachers tend to only encourage the use of computers for doing school assignments and seldom explore the full range of use of the computer. • Girls are less aware of their rights and are often passive learners because of the gender-biased social and cultural barriers which they face. They can become more aware of their rights in the sense of opportunities, and when their skill set is further enhanced they can see the potential of ICTs - as well as how they can be used for their own benefit. This will hopefully help them to be more proactive in their lives and the situations they face.

[39] A database company in Bangladesh that developed a basic encyclopedic CD.

Example 9: Identification of gender and ICT issues for Fantsuam Foundation's ZittNet, Community Wireless Network and Services

Name of the initiative	Gender analysis of Nigeria's first Community Wireless Network, ZittNet
Gender and ICT issues to be addressed in the evaluation	• Relevance of types of services provided by ZittNet to female and male clients • Affordability of wireless services to women and men • Level of access to timely and relevant information for health, education, and economic content • Level of women's participation in civic and governance issues • Level of literacy and how it affects service uptake by women • Women's income levels and how it affects service uptake • Limited experience in the use of technology: hold demos, training sessions, etc. in selected pilot communities.

What can be learned from the example above?

The problem in this situational analysis was not at such a macro level as that of D.Net's CLP described in Example 8. Here, the Fantsuam Foundation already knew that the problem was the low uptake of ZittNet's services by the women in the community they served. The Fantsuam Foundation identified the gender and ICT issues to be addressed based on three main aspects:

- Roles, responsibilities and activities of women vis-à-vis men (issues of need, decision-making, control and participation)
- Resources and constraints of women vis-à-vis men (issues of income, affordability of services, issues of language and literacy, opportunities of access and exposure to the technology)
- Benefits and incentives of women vis-à-vis men (issues of relevance of services and content, issues of encouragement and incentives so that they can actually begin to appreciate the potential benefit of ZittNet's services).

4.1.3 Step 3: Finalising evaluation questions

See GEM manual, pages 84–87.

Step 3 of GEM guides users in finalising their evaluation question(s). At this stage of the evaluation plan, there would be a more explicit idea and a high level of consensus among intended users already established of the gender and ICT issues that need to be addressed. This step is also a prerequisite to Step 4 of GEM—Setting Gender and ICT Indicators.

Evaluation questions establish the scope and direction of the evaluation process. Remember that formulating good evaluation questions is important because:

- They determine what aspects of the project will be included or excluded from the evaluation. Evaluation questions drive the evaluation, they are the organizing construct of an evaluation study or an organizational monitoring and evaluation framework, and are based on the evaluation objectives.
- They act as very good reminders to ensure we explore **why** something occurs, what worked for whom, under what conditions, and so on. Commitment to addressing gender issues within a rural ICTD project requires answering the question "Why?"
- They need answers, so you and your team have to formulate questions that you can realistically answer. Evaluation questions are based on the evaluation objectives.
- They allow for an intersectional analytical approach to gender, ICT and related sectoral issues within the specific context of a programme/project/initiative.

For this purpose, the following form (illustrated with a generic example) would be useful:

Intended use(s)	Evaluation questions	Evaluation domains / Areas of investigation (including gender and ICT issues)
Intended use No.1	Evaluation question No.1 Evaluation question No.2 Evaluation question No.3 Evaluation question No.4	
Intended use No. 2	Evaluation question No.2 Evaluation question No.3	
Intended use No. 3	Evaluation question No.4	

The generic example above shows that findings to all four evaluation questions would contribute to the first identified intended use, "Intended use No.1". On the other hand, "Intended use No.2" would only be served by findings or answers to evaluation questions numbers 2 and 3. Finally, only by obtaining answers to evaluation question number 4, would the intended users be able to get the information they need for the purpose identified under "Intended Use No.3". Findings or answers to evaluation questions numbers 1, 2 and 3 will not serve the purpose of this third intended use. In summary, answers to one evaluation question need not be limited to serving the purpose under one identified use. These answers could serve the purposes under other identified intended uses if there is more than one identified intended use.

The "Evaluation domains" or "Areas of investigation" should include the specific gender and ICT issues that need to be assessed and which the evaluation findings are meant to unearth. These are necessary to determine to what extent these have been addressed, and/or suggest ways to address them.

In generating evaluation questions, intended users must always link these questions back to the determined intended use(s) of the evaluation. Here is a general guide to generating evaluation questions.

- Collect all evaluation questions first and then cluster and synthesise
- Evaluation questions have to be specific enough to be useful in guiding you through the evaluation, but broad enough to be broken down (not the same as a question in a survey)
- Evaluation questions must be open questions (cannot be answered by "yes" or "no")
- When finalising the evaluation questions, only have two to a maximum of four evaluation questions
- Data (qualitative/quantitative) can be brought to bear on the evaluation questions
- Evaluation questions must have meaning for those developing the plan
- Evaluation questions must lead to useful, credible, evaluation.[40]

Remember that formulating evaluation questions may raise sensitive issues among members of the evaluation team, so the team has to be aware of this and respect the different opinions and perspectives and work for consensus. In the process of generating evaluation questions, one may find that there is a new intended use or uses for the evaluation, and that would have to be discussed before the evaluation questions are finalised.

[40] Jessica Dart's general guidelines on generating evaluation questions. For more information on Jessica Dart, see www.clearhorizon.com.au.

Example 10: Evaluation questions by Fantsuam Foundation for ZittNet

Evaluation questions	Scope and implications of evaluation questions
• Why are women's participation and uptake of ZittNet services so low?	This question explores all the potential and real barriers women face in making use of ZittNet's services. The possible reasons can be broken down to issues of affordability, women's income, women's familiarity and exposure to ICTs, women's perception of the relevance of these services, women's decision-making roles, women's responsibilities, etc.
• How are wireless services being provided to rural women?	This question looks at the delivery approach, the type of services being offered and the options for payment and types of services rendered.
• How does access to wireless services affect the poverty levels for women and their families?	This question not only looks at affordability of services, but goes beyond, and tries to explore the financial ramifications for women and their families when they do use ZittNet's services.
• What are the relevant ICT services that women need to enhance their capacities to access relevant information for their health, educational and economic development needs, which ZittNet can provide?	This question explores gaps in types of services provided and ZittNet's shortfall in optimising its capacity to meet the generally-known needs of women.
• What effective strategies can ZittNet use to increase demand for its services among women?	This question would encourage the Fantsuam Foundation to obtain ideas from the women themselves as to what would add more value to ZittNet services, from their perspective. This would include exploring how much would they pay for services, as well as for which services and under what conditions/circumstances.

What can be learned from the example above?

Remember that the Fantsuam Foundation's intended use for their evaluation findings on ZittNet is to develop a feasible strategy to increase women's uptake of ZittNet's wireless services. It is a very concrete and specific intended use. In developing the evaluation questions with the intended users, the Fantsuam Foundation had to examine the issue from both the "supply" and "demand" perspective. From a "supply" perspective, this meant considering what ZittNet is providing and can provide in terms of services. From a "demand" perspective, this meant exploring whether these services are really needed and relevant and useful in helping the rural women who are poor, who are already being served by the project in some way, as well as to those who have yet to be reached by the project. In attempting to answer the evaluation questions, the Fantsuam Foundation also considered "the possible loss" (loss of income, increase in poverty levels) that the project may have brought about because of unintended consequences. The column on the right, "Scope and implications of evaluation questions" also points to the more specific "Evaluation domains" or "Areas of investigation."

Example 11: Evaluation questions generated by D.Net for its Computer Learning Programme

When D.Net first explored developing its evaluation questions, they generated a long list of possibilities.[41]

Project planning
- Was gender equality or women's empowerment taken into account when the project goals were articulated?
- What was stated regarding how ICTs were to be used in the project?
- Was there a common understanding of the gender project goals among stakeholders?

Implementation of project activities
- What was the division of labour between women and men at the project operation level?
- What was the division of labour between female and male teachers at the project operation level?

Participation and experience
- What was the level of female and male teachers' and female and male students' participation in project activities?
- What was the nature of female and male teachers' and female and male students' participation in project activities?
- To what extent did women and men in the project team participate equally in decision-making?
- What was the experience of working with female and male teachers in ICT skills training?
- What was the experience of working with women and men as trainers and instructors for ICT skills training?

[41] D.Net had generated these questions based on the guiding questions listed in the GEM manual on page 87. They did, however, generate questions under a separate section on "critical reflection."

- What was the experience of working with women only as trainers and instructors for ICT skills training?

Project effectiveness
- What was the stated purpose of the CLP and its ICT-related activities?
- How did female and male students experience their effectiveness?

Networking and partnerships
- How did technology facilitate the creation and maintenance of networks for the rural students and/or teachers in the rural schools?

Change
- How did the experience of using ICTs change the way female and male teachers think about ICTs?
- How did the experience of using ICTs change the way female and male students think about ICTs?
- How would they use them differently in the future?
- To what extent did ICT skills training change female and male teachers' sense of personal confidence or empowerment?
- To what extent did ICT skills training change female and male students' sense of personal confidence or empowerment?

Critical reflection
- What are the critical reflections that the project team found so far in the project?
- How are gender issues being reflected through this critical reflection?

After discussing with its intended users of the evaluation findings, D.Net realised that there were three key evaluation questions that needed answering:

- What factors are affecting male and female students in attending the computer courses at their school?
- What factors are affecting male and female student's retention of the computer skills they obtained during the courses?
- What are the credible gender issue/ issues that need to be considered in the documentation and replication process?

What can be learned from the example above?

Crafting good evaluation questions is not easy. It is a tough process which takes time, requires multiple attempts before finalisation, and there are no short cuts. This is normal. The process will take longer the more involved your intended users are with the evaluation. Whatever the length of time taken to generate evaluation questions, there is always a need to list all of them and then to further synthesise. This can help avoid overlapping evaluation questions and hence, duplication of work, unnecessary work in collecting massive amounts of data which will most likely not be used, and in ensuring that the breadth of the evaluation is manageable and realistic to providing useful and credible findings. Plotting the relevant evaluation domains/areas of investigation to the relevant evaluation questions can be helpful by matching each domain with the relevant intended use(s).

Example 12: Final evaluation questions by Dr Anupama Saxena and her evaluation research team members

Dr Anupama Saxena and her evaluation research team determined two evaluation questions.

Intended use(s)	Evaluation questions	Evaluation domains / areas of investigation (including gender and ICT issues)
• Design a workshop to create awareness of gender issues in rural e-governance among various stakeholders including government officers, NGOs, and academia • Write articles for newspapers and give radio talks to create awareness of gender issues • Write a reflective piece on the experiences of using GEM • Prepare a research report to be available and accessible from the university library for use as a reference for further research.	Question #1: To what extent are rural men and women *sarpanchas* (heads of the village self-government units) able to participate equally in rural e-governance?	• Extent of availability of the technology (Simputer) • Extent of actual access to the technology (Simputer) • Extent of actual use of the technology (Simputer) • Proposals for use of the technology (Simputer) • Barriers to use of the technology (Simputer) • Extent of availability of support system for use and maintenance of the technology (Simputer) • Extent of accessibility of support system for use and maintenance of the technology (Simputer).
	Question #2: To what extent is the introduction of ICTs effective in changing the lives of men and women in the rural areas?	• Perception of advantages and disadvantages resulting from the introduction of the technology (Simputer) • Perceived increase or decrease in capacity in rural governance decision-making • Perceived increase or decrease in capacity to influence rural governance decision-making.

What can be learned from the example above?

Dr Saxena and her evaluation research team were conducting a gender evaluation of a rural e-governance scheme of the state of Chhattisgarh. It was not a project that was being implemented by her department or her university. Although there were four intended uses, both the evaluation questions would contribute evaluation findings that would serve all four intended uses, and this is also because for this particular case, there was one evaluation objective, "To unearth or make visible the gender issues in rural e-governance in the state of Chhattisgarh, India", which would then further inform their own advocacy work.

4.1.4 Step 4: Setting gender and ICT indicators

See GEM manual, pages 88–106.

GEM uses indicators in its methodology and Step 4 guides the user in developing relevant and effective gender and ICT indicators once the evaluation questions have been finalised. However, GEM recognises that there are other ways of measuring change and GEM has adopted these to complement the main methodology. This includes using an adaptation of the Most Significant Change technique and the case study approach.[42]

An indicator is a summary measure that aims to describe "a system" in a few numbers or in as much detail as possible. It is meant to help one understand, compare, predict, improve, and innovate. Indicators can take on a number of forms, which include:

- Pointers
- Numbers
- Facts
- Opinions
- Perceptions.

Indicators are summary measures of specific conditions and situations. They provide a closer look at results of initiatives and actions. They are recognised as useful tools to assess positions and directions with respect to values and goals. They can help to measure change, including behavioural change, and to determine the outcomes and overall effects of projects and programmes.

Like all powerful tools, indicators can do as much harm as good. That is why it is important to identify suitable and good indicators that complement the finalised evaluation questions so that they are helpful in pointing to what is worthy of further and deeper investigation. A good indicator focuses on causes not symptoms, and so should help us to understand why something occurs or does not happen, and is able to make linkages and relationships with other issues (for example: social, environmental, economic, etc.).

There is no such thing as perfect data or perfect indicators. The skilled manager/evaluator knows how to appraise the quality of the data and the subsequent indicator in context, and judge how important the indicator is to the whole decision-making process. The real question is: are the data good enough for the purpose in hand? Remember, these indicators are meant to help provide answers to the evaluation questions, which will then contribute to the final analysis and findings to be used to make further improvements.

How the indicators and the data that feed into them are selected will often involve making a trade-off between what is convenient (and possible) to collect, and what is ideally needed from the measurements. Making this judgment call will not always be easy, mainly because of the need to factor in how other people will react to being asked to

[42] The Most Significant Change technique was first developed by Rick Davies, and was later modified by Jessica Dart. Dart's approach focused on the interpretation of meaning from the stories and the judgements that are made when reading the stories and deciding whether they represent the sort of outcomes that are valued. Davies and Dart have since agreed on the name "Most Significant Change" technique and written a comprehensive user guide which can be downloaded from http://www.clearhorizon.com.au/flagship-techniques/most-significant-change/. The guide can also be found at http://www.kstoolkit.org/Most+Significant+Change.

collect the data if they see it as more work, or do not understand the rationale behind the measure. This includes considering how the respondents themselves will feel when asked for this data. This is why it is important that when an evaluation is conducted for a programme or project, the involvement of the community and the immediate beneficiaries served by said programme or project is equally critical.

Accessibility and affordability
- How easily can the data for each indicator be obtained and how much does it cost?
- Are partnerships within the community possible to access the data cost-effectively and efficiently?

Comparability (standardisation)
- How easily does this compare with indicators used for other local projects?
- Does it require a special survey that other communities would likely replicate?[43]

Consistency and reliability
- Is the information source likely to produce high quality data over a number of years?
- Are there indicators for the data that are not highlighted in the report?

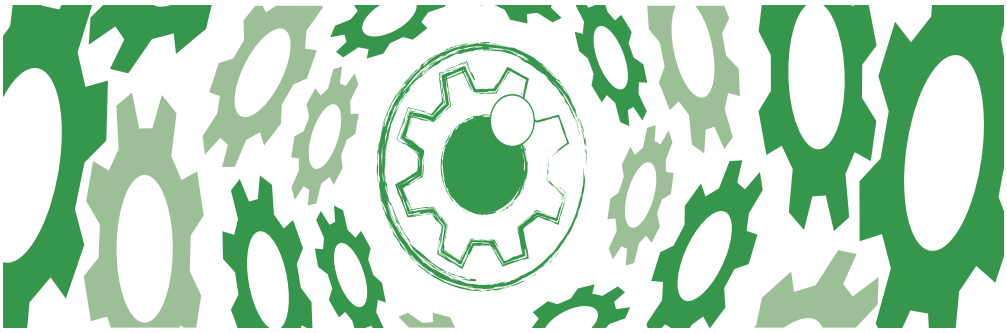
Credibility
- Is the indicator believable to the participants who selected it? To the community as a whole?
- Does the data source help reinforce credibility or detract from it?

Measurability
- Is the indicator framed in a way that can be answered by a number, percentage, or proportion?
- Does the data exist to address the indicator, or is there a practical way to obtain the data needed?

Relevancy
- Does the indicator address one of the community goals?
- Does it address the issue the community wants to know about?
- Does it help to communicate what is important?

Validity
- Is the indicator truly measuring what it is intended to measure, and not a by-product?
- Is the indicator well grounded and founded in fact?
- Can you support, defend, and justify it in logical or scientific terms?
- Is the indicator in any way biased in the way it privileges certain voices over others? If there is bias, is it justifiable?

Because GEM emphasises finding out answers to the question "why" something occurs or does not occur, GEM gives more



[43] Utilisation-focused evaluation methodologies such as GEM recognise that some indicators will be specific to certain projects because of the local context and intended uses of the evaluation. There may be instances when an indicator could be very specific for a project, but the experiences of GEM practitioners have shown that most often these specific indicators to unearth gender and ICT issues can be easily applied and adapted to different contexts.

weight to qualitative indicators. Not all of the above criteria will equally apply to qualitative indicators, because qualitative indicators consider perceptions and opinions which sometimes cannot be measured. However, these have validity and are extremely relevant if we consider whose voice is being privileged through these indicators.

Quantitative indicators are defined as measures of quantity, such as the number of women who have a computer at home but do not use it, the number of women who have computer skills compared to the number of men, the number of women who know how to use internet tools, etc. Quantitative indicators deal with outputs, and are easier to define and look for.

Qualitative indicators are defined as people's judgments, opinions and perceptions on a subject. For example: the kind of confidence gained after ICT training sessions, the type of issues women search for on the internet compared to men, whether people find that activities at a telecentre are useful, and the impact of connectivity on a community. Qualitative indicators deal with outcomes, and are more difficult to define and look for.

Qualitative indicators probe the whys of situations and the contexts of people's decisions, actions and perceptions. They are valuable to the evaluation process because projects and initiatives are involved with studying changes in people's lives and in communities. These indicators seek to measure impact and evaluate the longer-term effects and benefits of a project or an initiative.

Properly developed and interpreted, qualitative indicators play a significant role in identifying constraints to implementation and obstacles to success, which may not be readily apparent. They can also play an important role in promoting and understanding stakeholders' perspectives, particularly for women, thus fostering participation of women stakeholders.

To identify gender and ICT indicators, it may be helpful to consider the categories of indicators proposed in the GEM manual (see pages 96–99). These are:

- Access indicators
- Networking indicators
- Advocacy indicators
- Capacity-building indicators
- Organisational indicators
- Democratic communication indicators, which can take the form of:
  - Expanded public and private dialogue and debate
  - Increased accuracy of information that women share in the dialogues/ debates
  - Increased leadership and agenda-setting role by women on issues of concern.

Identifying gender indicators in ICT initiatives can be an effective way to ensure that women's specific needs are taken into account in the planning process. While a rich body of gender indicators has been developed and used in areas like health, education, human rights, human development, this is not the case with regards to ICT initiatives. Nevertheless, gender indicators that have been developed and used through the years in other fields can be applied in the ICT field as well.

The following questions can help keep the focus in setting gender and ICT indicators.

In what way does the project:

- Contribute to changing gender roles and relations?
- Facilitate women's empowerment?
- Encourage the strategic use of ICT?
- Enable gender transformative policies?
- Create economic opportunities for women?
- Promote communications rights?

Remember to also disaggregate user data by sex. This will say a lot about gender and ICT issues in the rural ICTD project, like activities of the immediate project beneficiaries, training sessions received, participation in decision-making bodies, participation in content creation, etc.

Example 13: Gender and ICT indicators developed by Fantsuam Foundation for ZittNet

Gender & ICT issue	Indicators	
	Quantitative	Qualitative
Relevance of types of services provided by ZittNet to female and male clients	• Number of microfinance clients (male/female) who live in area covered by ZittNet wireless • Number of non-microfinance clients (male/female) who live in the target area • Number of microfinance female clients who are using ZittNet services • Number of women have introduced their female friends / daughters to take up ICT courses at ZittNet • Number of non-microfinance clients (male/female) who are using ZittNet services.	• Types of services provided by ZittNet • Types of ZittNet services used by microfinance clients • Types of ZittNet services used by non-microfinance clients • Reasons why microfinance and non-microfinance clients are not using the wireless services • Reasons why friends and daughters of Fantsuam Foundation members who are aware of the ZittNet services, are not taking these up.

What can be learned from the example above?

Generally, the indicators with a sex-disaggregated dimension limit perception to only the numerical participation of females within the society. There is no harm in using such indicators, as quantitative data is the basis for qualitative change. However, the missing consideration that one would need to look out for is how the female participation changes the behaviour of the male counterpart in terms of accepting them as partners, how women who are getting a particular benefit from a project can actively apply to change their stereotyped roles in a society.

In short, what is the woman's own agency? A true gender analysis of a project must not miss this aspect. Such analysis may contain both qualitative and quantitative indicators. For example: asking to what extent a project really includes female beneficiaries in the decision-making process points to a qualitative indicator of level (quality) of participation. The quantitative part of this indicator is the proportion of women who can participate in community decision-making.

The following three core components should be considered when developing indicators:

Sustainability: For any project, the definition of "sustainability" should be determined first, and should ideally not only be limited to issues of financial sustainability but also include issues of ownership and issues of behavioural change. Then a set of indicators can be

developed to measure the sustainability. The issue of sustainability is generally relevant for long-term projects. However, a short-term project related to software development may also have sustainability concerns, particularly from the perspective of users of the software: whether the support service will be available after several years of use, whether a new version will be available and if this will cost extra, etc. One of the ways to address that concern is to make software open source, giving others the opportunity to take care of software services and updates. The measurement of sustainability must not only consider the timeframe but also external forces, unanticipated consequences, and coping strategies. People have ways of fighting, continuing their struggle, and not giving up if there is sufficient conscientisation, collective mobilisation and ownership.

Empowerment: In rural projects, the elements of empowerment should be designed considering the cross-cutting nature of the issue. The typical indicators of empowerment may be: self-confidence or change in decision-making processes, roles and responsibilities. Also, we need to be very aware that without local support, the empowerment drive can be disempowering if it brings about a clash of old but discriminatory yet accepted practices and the new. The empowerment issue usually agitates existing power relationships, and in designing interventions and indicators, these factors should be considered.

Transformation: Change can be observed over time, and behavioural change can be very feasibly brought about even in a short-term project. This would depend heavily on the design of the intervention strategies. The depth of change is an issue which is not always related to length of a project's term. A project may be implemented for many years, but change expected from the project intervention may not be deep due to socio-cultural factors which remain unaddressed because they are not considered in the initial design nor unearthed in subsequent monitoring and evaluation processes and incorporated in the re-design. Depth of change is interlinked with issues of sustainability. In developing indicators of change, questions like "what is the change", "what is the quality of the change", "what is the kind of change", "what is the level of change" have to be rooted to the project's theory of change and situational analysis with a gender perspective. The depth of change can include extended change, and/or change for the individual, family and the organisation. In attempts to measure change, one should also ask about possible losses due to change expected as a result of the project's intervention.

Example 14: Gender and ICT indicators developed by D.Net for its Computer Literacy Programme

Here is an example of the gender and ICT indicators that D.Net developed for its Computer Literacy Programme in Bangladesh. D.Net had to develop an extensive set of indicators for each evaluation domain or area of investigation. There were three evaluation questions in total.

Question #1: What factors influence male and female students in attending the computer courses at their school?

Question #2: What factors are affecting male and female students' retention of the computer skills they obtained during the courses?

Question #3: What are the credible gender issue/issues that need to be considered in the documentation and replication process?

Evaluation questions	Question #1: What factors influence male and female students in attending the computer courses at their school? Question #2: What factors are affecting male and female students' retention of the computer skills they obtained during the courses? Question #3: What are the credible gender issue/issues that need to be considered in the documentation and replication process?
Specific evaluation domains / areas of investigation (including gender and ICT issues)	To gain a better understanding of the access level to computers by students (male/female).
Indicators (quantitative and qualitative)	• Number of students (male/female) enrolled in the computer course • Matching subjects between course curriculum and student's core education curriculum • Student (male/female) selection process for the computer courses • Capacity of the computer laboratory; number of students (male/female) per batch, total computers, total batches taught per day, etc. • Duration and time of the computer course • Practice opportunities for students • Access opportunities after training.
Reflections on the identified indicators	To help answer the three evaluation questions, D.Net begins by looking closely at the gender gap, as evidenced by the difference (if any) between the number of male and female students enrolled in the computer course. But knowing and identifying this gap is not sufficient to explain why this gap exists, if at all. D.Net has to dig deeper, by looking closely at the potential influential factors that are less obvious. For example: it is possible to examine the selection process for enrolment into the computer courses, the criteria used, and how girls and boys may fare differently for each criteria because of existing advantages and disadvantages as a result of how they are socialised and valued by society. Another area worth examining is how resources are allocated and who decides on this allocation. This can be done by looking at the opportunities, the quality and frequency of access, etc.

Reflections on the identified indicators (cont'd)	One of the indicators, however, makes an assumption. If the computer course curriculum matched the student's core education curriculum, there would be a linear correlation to student attendance. The resulting data has to be explored further before such a conclusion can be made. In fact, D.Net found out that this is not necessarily so because the male and female students had different ideas of the potential of the use of ICTs, with girls identifying how it can help them to further develop home-based income-generating projects while boys were limited to the conventional assumption that learning how to use the computer will help them get jobs or enable them to set up businesses (see Box 1).

Evaluation questions	Question #1: What factors influence male and female students in attending the computer courses at their school? Question #2: What factors are affecting male and female students' retention of the computer skills they obtained during the courses? Question #3: What are the credible gender issue/issues that need to be considered in the documentation and replication process?
Specific evaluation domains / areas of investigation (including gender and ICT issues)	To capture the experiences of the project's beneficiaries and to determine whether and to what extent the feedback varies for males and females.
Indicators (quantitative and qualitative)	• The first reaction of the students when they hear about having the CLP programme in their school • The first reaction of the students when they see the computers at their school • The first reaction of the teachers (trainers) when they hear about having the CLP programme in their school • The first reaction of the teachers (non-trainers) when they hear about the news of having the CLP programme in their school

Indicators (quantitative and qualitative) (cont'd)	• The first reaction of the parents when they hear about having the CLP programme in the schools where their children are taught • How does this CLP programme benefit students? • What did the students learn about the computer from their training? • What did the students learn about the computer outside of their training? • How did this improve student education? • What are the immediate steps that students have taken in their education processes? • What other subjects can benefit from having computer education? • Are there any changes in students' future goals? • Are there different social views among the computer literate students and the non-computer literate students? • How does the CLP programme benefit teachers? • What did teachers learn about computers from the D.Net training? • How are the computer laboratories used in training other teachers? • How are the computer laboratories used in school activities such as result sheet preparation, etc.? • How does this help teachers provide a higher quality education to their students? • What immediate steps do teachers take in their teaching processes? • Which other subjects can benefit from having computer education? • What are the social views of the computer teachers?
Reflections on the identified indicators	Indicators that try to capture "first reactions" may be limited in terms of reliability because they rely on recall, especially if questions in relation to first reactions come much later after the project was started or when the project is completed. This does not mean that D.Net should not try to capture such data but the limitations of such data must be recognised if it is being captured at a later time and not at the start of the project. The identified indicators that emphasise the "what" and "how" are actually interrelated. It is good that D.Net also identified the need to examine the "how" aspects of its CLP and did not stop at the "what" aspects. Data collected on the "how" indicators will help inform D.Net on "why" certain occurrences take place and allow for a deeper analysis in relation to the evaluation questions posed.

Evaluation questions	Question #3: What are the credible gender issue/issues that need to be considered in the documentation and replication process?
Specific evaluation domains / areas of investigation (including gender and ICT issues)	To better understand the potential of creating new leadership by this process and to determine how it is different for males and females.
Indicators (quantitative and qualitative)	• Are any student recommendations about the school management system looked at by school management? • Are any teacher recommendations about the school management system looked at by the school management? • Effective participation in friend, family, society decision-making processes both for students and teachers.
Reflections on the identified indicators	These indicators are important because they speak to issues of control, and control is identified as one of the underlying causes of gender issues which intersects with issues of age and socio-economic and political status.

Evaluation questions	Question #1: What factors influence male and female students in attending the computer courses at their school? Question #2: What factors are affecting male and female students' retention of the computer skills they obtained during the courses? Question #3: What are the credible gender issue/issues that need to be considered in the documentation and replication process?
Specific evaluation domains / areas of investigation (including gender and ICT issues)	To better understand the factors influencing students' participation in this course.

Indicators (quantitative and qualitative)	• Personal willingness to learn how to use the computer prior to enrolment • Actions taken by students to reflect their personal willingness to learn how to use the computer • Student selection process for the course • Process of getting parental permission for enrolment • Student involvement in other social and economic activities that prohibits them from enrolment in the computer course.
Reflections on the identified indicators	Some of these indicators are the same indicators that have been identified for different purposes of the evaluation or evaluation domains. This is good because it means that the data that such indicators collect can inform D.Net on various areas of investigation and information that the evaluation seeks to unearth.

Evaluation questions	Question #3: What are the credible gender issue/issues that need to be considered in the documentation and replication process?
Specific evaluation domains / areas of investigation (including gender and ICT issues)	To assess the critical reflection and gender issues of all relevant stakeholders.
Indicators (quantitative and qualitative)	• What new insights are there in the operating process of the CLP programme for students, teachers, parents and schools' management? • What are the strengths, weaknesses, opportunities and threats (SWOT) of the project among the beneficiaries?
Reflections on the identified indicators	Assessing the understanding and appreciation of gender issues among different stakeholders of the project is important because such information will help D.Net know if new strategies need to be developed to strengthen their intervention or whether existing strategies can be improved (refer to the Strategy Map in Matrix 2).

Evaluation questions	Question #3: What are the credible gender issue/issues that need to be considered in the documentation and replication process?
Specific evaluation domains / areas of investigation (including gender and ICT issues)	To assess the behavioural change among the project beneficiaries and to determine or unearth the differences in behavioural change between males and females.
Indicators (quantitative and qualitative)	*For students:* • Attraction to computers • Sharing learning processes with others • Encouraging other students to enrol in the course • Student attitudes in the class • Willingness to practise more • Willingness to have a personal computer. *For teachers:* • Attraction to computers • Sharing learning processes with others • Encouraging other teachers and neighbouring schools to start the course • Willingness to introduce computers in other classes • What roles do they play to develop capacity of students apart from training? • Impact of overall student enrolment in the school after having CLP programme • Willingness to have a personal computer. *For parents:* • Understanding the benefits of computer course for their children • How do they decide to allow their children to participate in the computer course? • Do their children share the experiences of the course with them? • Willingness to buy a personal computer for their child.
Reflections on the identified indicators	Measuring and assessing behavioural change is one of the most critical areas that indicators should contribute to, if the organisation and/or project are committed to addressing gender. Most organisations face challenges in how to best capture these behavioural changes and then to analyse these to see not only if there are differences in behavioural changes between males and females, but to what extent these behavioural changes influence a change in their value or belief systems.

Evaluation questions	Question #3: What are the credible gender issue/issues that need to be considered in the documentation and replication process?
Specific evaluation domains / areas of investigation (including gender and ICT issues)	To identify ways to attract new investors for investing in girls' schools.
Indicators (quantitative and qualitative)	• Number of schools having the computer course and the category of the school (only girls, only boys or co-education) • Enrolment ratio among boys and girls • Social and family obstacles that boys and girls face in attending the computer course • Result of the computer graduates in schools and public exams • Present status of male and female CLP graduates • Change in future career directions for girls and boys.
Reflections on the identified indicators	These indicators directly serve an intended use of the evaluation. For D.Net, the intended use identified was to write articles about the gender perspective of the project and share the evaluation results with CLP investors through conference calls and email interactions in order to motivate them to invest more in girls' schools to make the project relevant for the really underprivileged. In order to do this effectively, D.Net identified indicators that could educate investors on why the current scenario exists (root causes for social obstacles that boys and girls face in attending computer courses).

Evaluation questions	Question #1: What factors influence male and female students in attending the computer courses at their school? Question #2: What factors are affecting male and female students' retention of the computer skills they obtained during the courses? Question #3: What are the credible gender issue/issues that need to be considered in the documentation and replication process?
Specific evaluation domains / areas of investigation (including gender and ICT issues)	To assess the networking opportunities by students and to determine how differently these opportunities are affecting males and females.

Indicators (quantitative and qualitative)	• Participation in extracurricular activities like student clubs, voluntary activities, community affairs, etc. • Writing stories to share experiences with others • The media used when sharing experiences.
Reflections on the identified indicators	With these indicators, D.Net tries to uncover how the use of what students have learned through the CLP course extends beyond the school's core curriculum, their studies and homework. Such indicators can be very helpful because they give insights into the users' perception of their own needs and priorities of their use of the computer. Otherwise, indicators are often based on what the project designers and implementers think and assume should be the users' priorities.

Evaluation questions	Question #3: What are the credible gender issue/issues that need to be considered in the documentation and replication process?
Specific evaluation domains / areas of investigation (including gender and ICT issues)	To draw out policy issues which are relevant to gender equality and to address gender issues.
Indicators (quantitative and qualitative)	• How relevant are national policies (education policy, ICT policy, women's empowerment policy etc.) in creating better enrolment opportunities for females? • Provision of and types of gender issues in feedback to government policies through: • Articles published in media outlets • Outputs and outcomes of consultation meetings with women leaders • Outputs and outcomes of consultation meeting with education experts.
Reflections on the identified indicators	These indicators seek to highlight which gender issues are missing from policy or should be covered in policy. These are the kinds of indicators that often contribute to "process use," which includes advocacy for policy change that can take place during the evaluation process and not necessarily only at the end of the evaluation process.

Evaluation questions	Question #1: What factors influence male and female students in attending the computer courses at their school? Question #2: What factors are affecting male and female students' retention of the computer skills they obtained during the courses? Question #3: What are the credible gender issue/issues that need to be considered in the documentation and replication process?
Specific evaluation domains / areas of investigation (including gender and ICT issues)	To better understand the scope of changes in project implementation by the project team.
Indicators (quantitative and qualitative)	• School selection process • Teacher/trainer selection process • Teacher training methodology • Selection process for students in the computer course • Course time and routines • Training methods • Are schools connected to the internet? • Monitoring and evaluation processes.
Reflections on the identified indicators	There are some reoccurring indicators here, which is good because it means that one can collect data and information that will be useful for a number of evaluation domains.

What can be learned from the example above?

The more evaluation domains or areas of investigation that are considered applicable and necessary in answering each evaluation question, the more extensive the set of indicators will be. To ensure that this whole exercise does not overwhelm your evaluation team and other intended users, these indicators should be reviewed and it should be determined if they are indeed necessary or if the evaluation objectives and intended uses of the evaluation could do without collecting the data. Sometimes, this can still mean collecting data on one particular indicator which may provide data and information for only one sub-area of an evaluation domain and not contribute to any of the others.

4.2 Phase 2: Gathering information using gender and ICT indicators

See GEM manual, pages 107–127.

This phase of the methodology focuses on various data-gathering methods and on analysing data from a gender perspective.

4.2.1 Step 5: Selecting data gathering methods/tools

See GEM manual, pages 108–121.

It is important to plan a detailed strategy for gathering and analysing information about gender and ICT issues in a project and to monitor gender and ICT indicators. This section aims to describe the process of collecting information and outlining effective methods in drawing out useful data

and information for measuring the changes resulting from an ICT intervention.

The objectives for information-gathering include the following:

- To identify information-gathering strategies adequate to the evaluation needs that take into account gender considerations using a variety of methodologies
- To categorise findings according to gender and ICT evaluation questions
- To gather and document stories/testimonies about gender issues within an evaluation
- To reflect critically on these findings and extract lessons
- To prepare the evaluation report to reflect this information.

The choice of a data gathering method should come after determining an evaluation's objectives. This is the evaluation's overall purpose, and it is often broader than the intended use.[44] This should be determined along with the intended use(s), the evaluation questions and the corresponding gender and ICT indicators. In order to obtain consistent and accurate information that can be verified, it is important to use a combination of several methods and not stick to one only.

Essentially, data can be collected from two sources: artefacts (documents, videos, websites, etc.) and people. Document sources can be internal (financial statements, annual reports, human-resource policy, programme planning documents, strategic plans, promotion brochures, evaluation reports) or external (country policies, legislation, media reports, donor reports). Data can also be obtained through people, either individually or in groups, either directly through conversation or indirectly through questionnaires.

Using GEM to evaluate a project, however, means selecting data gathering methods that can help to gather information with a gender perspective. How can one select these methods? Some tips are:

- Choose methods that are adequately efficient in collecting both needed and relevant data
- Choose participatory methodologies
- Use different methodologies to prove, verify, and relate information from different sources
- Collect sex-disaggregated data
- Identify women participants as respondents
- Include questions on gender roles
- Pay close attention to the context
- Keep a place for qualitative information.

Example 15: Data gathering methodologies identified by the Fantsuam Foundation for its ZittNet evaluation

Example 15 presents the data gathering methodologies identified by the Fantsuam Foundation for the gender evaluation it was undertaking on ZittNet and its wireless services. In identifying these data gathering methodologies, the Fantsuam Foundation not only had to consider the best methods to gather data for the corresponding indicators, but also how comfortable the respondents would be with these methods. The Fantsuam Foundation undertook community consultations during advocacy visits to the homes and offices of community leaders, while focus group discussions were conducted as part of the loan recovery visits facilitated by the Microfinance Field Officers. The review of available documents (microfinance officer field reports and ZittNet client subscription records) helped to determine patronage and geographical spread of the wireless service. The Fantsuam Foundation also found that storytelling was the favourite method for their not-too-literate clients who wanted to share their experiences with ICTs and their impact on their families and livelihoods.

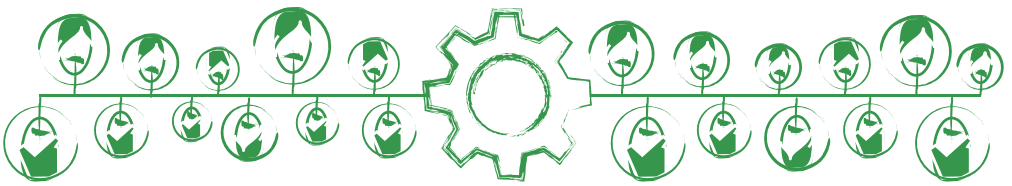
[44] For example: one of the evaluation objectives for the Computer Learning Programme evaluation done by D.Net could be articulated as: "To determine the effectiveness of the CLP in enhancing the skill set and skill development of rural school students." One of the intended uses could be determined as: "To design and develop additional computer learning modules that would enhance the skill set and skills development of rural school students."

Indicator	Data source	Method/ tool	Time/ frequency
How many microfinance clients live in the area covered by ZittNet wireless?	• Microfinance records.	• Microfinance field officers • Documents & records review • Observations.	• From date of commissioning of ZittNet, October, 2007.
How many non-clients live in the target area? How many are using ZittNet?	• Microfinance records • Local government.	• Document & records review • Observations.	• Monthly, during field officer visits.
How many microfinance female clients are using ZittNet services?	• ZittNet records.	• Microfinance field officers • Document & records review • Observations.	• Monthly, during field officer visits.
What services are being provided to them?	• ZittNet records.	• Document or records review.	• Monthly, during field officer visits.
How many clients/ non-clients have introduced their female friends/ daughters to take up ICT courses at ZittNet?	• ZittNet records.	• Questionnaires • Focus group discussions • Face-to-face interviews.	• Monthly, during field officer visits.
How many non-microfinance clients are using ZittNet services?	• ZittNet records.	• Questionnaires • Focus group discussions • Face-to-face interviews • Observations.	• Monthly, during field officer visits.
Why are some microfinance and non-microfinance clients NOT using the wireless services?		• Questionnaires • Focus group discussions • Face-to-face interviews • Observations.	• Monthly, during field officer visits.

Indicator	Data source	Method/ tool	Time/ frequency
Why are friends and daughters who are aware of the services not taking it up?		• Questionnaires • Focus group discussions • Face-to-face interviews.	• Monthly, during field officer visits.
How useful have they found the services being provided?		• Questionnaires • Focus group discussions • Storytelling • Face-to-face interviews.	• Monthly, during field officer visits.
What additional services would they like to see provided?		• Questionnaires • Focus group discussions • Storytelling • Observations.	• Monthly, during field officers visits.
How much would they be willing to pay for these services?		• Questionnaires • Focus group discussions • Storytelling • Observations.	• Monthly, during field officer visits.

What can be learned from the example above?

It is useful to list the indicators and the data sources and data gathering methods or tools, because it can help in deciding which indicators have more than one data source and/or data gathering method, and to better plan for the data collection. It is also important to consider how data collection will be integrated within the existing framework of the programme or project team and if extra efforts would be needed to administer, for example: a special survey questionnaire. Extra efforts to collect additional data may have cost implications for the project or organisation undertaking the gender evaluation.



Example 16: Data gathering strategies identified by D.Net for its Computer Literacy Programme

The following specific methods were identified for use for data gathering for the CLP evaluation:

- Records: school record or logbook of use, result sheets, monthly reports of CLCs etc.
- Internal documents: original project proposals or funding agreements, papers related to the development of the work, reports, correspondences, minutes of meetings, etc.
- Interviews: with the project team, trainees, teachers and trainers, parents of the students, school committee, other organisations having similar projects, policy makers, women leaders etc.
- Discussions or focus groups: with staff members, students and teachers, etc.
- Surveys and questionnaires: filled in by various stakeholders
- Stories: collect stories from the project locations on a regular interval.

After the finalisation of identifying suitable data gathering methods, data gathering strategies and developing the evaluation questionnaires, the D.Net evaluation team developed a checklist to conduct the focus group discussions (FGDs) and the onsite observations. The evaluation team pre-tested these questionnaires and checklists, and found out that:

- The survey questionnaires for the different groups of respondents were not sufficient to document the answers for open-ended questions. Face-to-face interviews would have to be conducted using the questions in the survey as the main guide
- It was not feasible to conduct FGDs with teachers because in most of the rural schools, only one teacher is assigned to teach the course
- It was not appropriate to conduct FGDs with parents because the same questions were being asked during the face-to-face interviews
- Some of the questions in the survey were not so easily understood by the students and had to be re-phrased, or complemented with follow-up questions.

Indicator	Data source	Method / tool
Number of students enrolled in the computer course	• Monthly or quarterly school reports.	• Document review.
See whether the course curriculum matches with the students' core education curriculum	• Manuals • Syllabus • Student & teacher opinion.	• Document review • Focus group discussions.
Student selection process for the computer courses	• Registration reports • Documents • Teachers.	• Document reviews • Interviews.

Indicator	Data source	Method/ tool
Capacity of the computer laboratory, number of students per batch, total computers, total batches taught per day, etc.	• Reports • Project team • Teachers.	• Reviews • Interviews.
Duration and time of the computer courses	• Course curriculum.	• Reviews.
Practice opportunities for the students	• Students • Teachers • Project monitoring team.	• Focus group discussions.
After-training access opportunities	• Teachers • Students.	• Focus group discussions • Observations.
The first reaction of students when they first saw the computers at their schools	• Students.	• Focus group discussions.
The first reaction of teachers (who are trainers) when they first hear about the news of having the CLP programme in their schools	• Teachers.	• Focus group discussions.
The first reaction of teachers (who are non-trainers) when they first hear about the news of having the CLP programme in their schools	• Teachers.	• Focus group discussions.
The first reaction of parents when they first hear about the news of having the CLP programme in the schools where their children are taught	• Parents.	• Focus group discussions.
How is this CLP programme benefiting students for what they learn about computers?	• Students.	• Focus group discussions.
What did they learn about computers outside of training?	• Students.	• Focus group discussions.

Indicator	Data source	Method/ tool
How does this help students to have an improved education?	• Students.	• Focus group discussions.
What are the immediate steps that students have taken in their education processes?	• Students.	• Focus group discussions.
What are other subjects (education courses) that can benefit from having computer education and how can this happen?	• Students.	• Focus group discussions.
Are there any changes in their aims for their future life?	• Students.	• Focus group discussions • Interviews.
What are the social views of computer literate students and non-literate students?	• CLP students • Non-CLP students.	• Interviews • Case studies.
How is this CLP programme benefiting teachers? What did they learn about computers from the D.Net training?	• Teachers.	• Interviews.
How were the computer laboratories used in training other teachers?	• Teachers.	• Focus group discussions • Interviews.
How were these computer laboratories used in school activities such as result sheet preparation, etc.?	• Teachers.	• Focus group discussions • Interviews.
How does this help teachers to provide quality education to students?	• Teachers.	• Focus group discussions.
What are the immediate steps that teachers have taken in their teaching processes?	• Teachers • Headmasters.	• Focus group discussions.
What others subjects (education courses) can benefit from having computer education? How?	• Teachers.	• Focus group discussions.

Indicator	Data source	Method/ tool
What are the social views of the computer teachers?	• Teachers.	• Interviews • Case studies • Focus group discussions.
Are any student recommendations about school management system taken up by the school management?	• Students • School management/ headmaster • Project team.	• Focus group discussions
Are any teacher recommendations about school management system taken up by the school management?	• Teachers • School management / headmaster • Project team.	• Focus group discussions.
Is there effective participation in friendship, family or society decision-making processes both by students and teachers?	• Students • Teachers.	• Focus group discussions.
Is there a personal willingness to learn how to use the computer before enrolment?	• Students.	• Focus group discussions • Case studies.
What actions are taken by students to reflect his/her personal willingness to learn how to use the computer?	• Students.	• Focus group discussions.
What is the student selection process for the course?	• Teachers • Documents • Project team.	• Document reviews • Group discussions.
What is the process of getting parental permission for course enrolment?	• Parents • Teachers • Students.	• Focus group discussions • Interviews.
Is there student involvement in other social and economic activities that prohibits them from enrolling in the computer course?	• Students • Teachers • Project monitoring team.	• Case studies • Focus group discussions.

Indicator	Data source	Method/ tool
What new insights are there in the operating process of the CLP programme for students, teachers, parents and school management?	• Project team.	• Discussions.
What is the SWOT of the project among the beneficiaries?	• Project team.	• Discussions.
Is there a student attraction to computers?	• Students.	• Focus group discussions.
Do students share learning processes with each other?	• Students.	• Focus group discussions.
Do students encourage other students within the course?	• Students.	• Focus group discussions.
What are the teachers' attitudes in the classroom?	• Students.	• Focus group discussions.
Is there a willingness to practise more?	• Students • Teachers.	• Focus group discussions.
Is there a willingness to have a personal computer?	• Students • Parents.	• Focus group discussions.
Are teachers attracted to learning how to use the computers?	• Teachers.	• Focus group discussions.
Do teachers share learning processes with others?	• Teachers.	• Focus group discussions.
Do teachers encourage other teachers and neighbouring schools to start up CLP courses?	• Teachers.	• Focus group discussions.
Do teachers show a willingness to introduce computers to other classes?	• Teachers • Students • Headmasters.	• Focus group discussions.
What roles do they play to develop capacity of students apart from training?	• Students • Teachers.	• Focus group discussions.

Indicator	Data source	Method/ tool
Are teachers willing to have a personal computer?	• Teachers.	• Focus group discussions.
What is the impact on overall student enrolment in the school after having the CLP course?	• Teachers.	• Focus group discussions.
Do parents understand the benefits of the computer course for children?	• Parents.	• Focus group discussions.
How do parents decide to allow children to enrol in the computer course?	• Parents.	• Focus group discussions.
Do their children share the experiences of the course with them?	• Parents.	• Focus group discussions.
Willingness to buy a personal computer for their child	• Parents • Students.	• Focus group discussions.
What is the number of schools holding computer courses and what is their category? (only girls, only boys, co-education)	• School profile • Project team • Annual reports • Progress reports.	• Document reviews.
What is the enrolment ratio among boys and girls?	• Monthly reports • Project team • Teachers.	• Reviews • Interviews.
What social and family obstacles do boys and girls face in attending this course?	• Teachers • Students • Parents • Project team.	• Focus group discussions • Case studies.
What are the results of the computer graduates in school and public exams?	• Headmasters • Documents.	• Reviews • Interviews
What is the present status of both male and female CLP graduates?	• Annual reports • Project team.	• Reviews • Interviews.
Is there a change in future career directions for girl and boys?	• Students.	• Interviews • Focus group discussions.

Indicator	Data source	Method/ tool
Do students participate in extracurricular activities like student clubs, voluntary works, community affairs, etc.?	• Students.	• Interviews.
Writing stories to share experiences with others	• Documents.	• Document reviews.
Media, sharing experiences	• Documents (school magazines, newsletters, emails).	• Document reviews.
How relevant are national policies (education policy, ICT policy, women empowerment policy etc.) in creating better enrolment opportunities for females?	• Policy • Experts.	• Focus group discussions • Policy reviews.
Provide feedback to government policies through publishing article in media, consultations with women leaders, consultations with education experts	• Newspapers • Experts.	• Newspaper reviews • Meetings.
What is the school selection process?	• Project team • Documents.	• Interviews • Document reviews.
What is the teacher/trainer selection process?	• Teachers • Headmasters • Project team • Documents.	• Interviews • Document reviews.
What is the teacher training methodology?	• Project Team • Documents.	• Interviews • Document reviews.
What is the selection process for students in the computer course?	• Teachers • Students • Project team • Documents.	• Interviews • Document reviews.

Indicator	Data source	Method/ tool
What is the course time and routine?	• Project team.	• Interviews.
What training methods are used?	• Teachers • Project team.	• Interviews.
When are schools connected to the internet?	• Project team.	• Interviews.
What are the monitoring and evaluation processes?	• Project team • Monitoring and evaluation reports.	• Interviews • Report reviews.

What can be learned from the example above?

It is important to pre-test the tools that you will use in collecting data. This is because there has to be a standardised understanding of the questions posed if data that are to be collected will be comparable and properly collated. Pre-testing is critical to ensure that all questions are not only easily understood but that there are no information gaps that might have been overlooked in the design of the tool. With a long list of indicators and an extensive amount of data to be collected, it is even more critical that questions do not overlap and end up collecting the same data or information, or respondents may tire easily from questions which they feel are unnecessarily repetitive.

Example 17: Data gathering methodologies used by Dr Anupama Saxena and her evaluation research team

This example from the experience of Dr Saxena and her team proposes the use of field research diaries in the collection of data. Field research diaries are very important data collecting tools. If documented well, they provide a richness of information that can escape notice compared to other tools and methods. Field research diaries require self-discipline in completing and Dr Saxena ensured that team members were given the time to write down their reflections and field notes at the end of each field day. The example presents how the indicators correspond with each evaluation question and the resulting identified data gathering methodologies. For ease of perusal, these evaluation questions and the corresponding indicators, data sources and identified gathering data methods, are presented separately.

Evaluation question #1: To what extent are rural men and women *sarpanchas* (heads of the village self government units) able to participate equally in rural e-governance?

Indicator	Data source	Method
Number of men and women *sarpanchas* to whom technology is available	• Official records • *Sarpanchas.*	• Document reviews • Personal interviews.
Number of men and women *sarpanchas* having actual access to technology • Who actually keeps the Simputer? • Where is the Simputer kept?	• Field investigators • Male and female *sarpanchas* • *Gram Panchayat* secretary • Village community.	• Personal interviews • Focus group discussions • Field research diary.
Number of men and women *sarpanchas* actually using the technology	• *Sarpanchas* • Field investigators.	• Personal interviews • Focus group discussions • Field research diary.
Proposals for using the technology by men and women *sarpanchas*	• *Sarpanchas* • Field investigators.	• Personal interviews • Focus group discussions • Field research diary.
Barriers in using the technology for men and women *sarpanchas* • Language • Content • Literacy • Technology • Personal • Others.	• Government records • *Sarpanchas* • Content developers • Technology developers • Field investigators.	• Document reviews • Personal interviews • Focus group discussions • Online interviews.
Access and use of support system by men and women *sarpanchas* • Training • Maintenance and repair of Simputers.	• Government records • *Sarpanchas* • Content developers • Technology developers • Field investigators.	• Document reviews • Personal interviews • Focus group discussions • Online interviews.

Evaluation question #2: To what extent is the introduction of ICTs effective in changing the lives of men and women?

Indicator	Data source	Method
Perceptions of men and women about the effectiveness of technology in their work as *sarpanchas* and in their daily lives • Advantages • Disadvantages.	• *Sarpanchas.*	• Personal interviews • Focus group discussions.
Effectiveness of technology on the capacity of men and women for decision-making in rural governance as is stated in the objectives of the scheme	• Government officers • *Sarpanchas.*	• Personal interviews • Focus group discussions.
Effectiveness of technology on the capacity of men and women to influence the decision-making process in rural governance	• Government officers • *Sarpanchas.*	• Personal interviews • Focus group discussions.

What can be learned from the example above?

The field research diaries helped Dr Anupama Saxena realise that her evaluation research team members who were students, were giving emphasis more to the collection of data and information than is required by the tool, rather than to who was answering their questions. It turned out that the husbands of some of the women *sarpanchas* were supplying the information requested. This goes back to the very important consideration in the collection of data for evaluative research, "Whose voice is being privileged?"

4.2.2 Step 6: Analysing data from a gender perspective

See GEM manual, pages 122–127.

Analysis converts raw data into useful information. Because raw data is always drawn out from a particular situation or context, analysis of such data will require human judgment, which in turn relies on a good understanding of the root causes of the problem concerned and how both root causes and the resulting effects and outcomes of that problem intersect and interact with one another to reinforce the existence and continuance of the problem.

Contextualising gender and ICT issues and conducting a gender analysis require us to continue to "dig deeper" during our monitoring and evaluations. One key method of conducting a gender analysis is to explore the nature of gender differences and their political meanings by systematically asking questions to gauge how different men's situations are from those of women in a given population. We need to systematically ask questions to get to the real picture. In short, we need to:

- Find out what lies behind the data
- Ask why
- Consider the woman's context
- Consider our own gender bias
- Consider our own project bias.

Gender analysis is applied at the following three levels:

- Roles, responsibilities and activities
- Resources and constraints
- Benefits and incentives.

At each level, a simultaneous interrogation of gender, gender roles, gender relations and women's empowerment should take place as well (refer to Section 2.1 and Table 2).[45]

Gender analysis with an evaluative perspective involves a systematic assessment of the different effects of project activities on women and men. Gender analysis within an ICT context asserts that power relations involving class, race, ethnicity, age, and geographic location interact with gender to produce complex inequalities relating to social change in general, and those changes brought on by ICTs in particular. Disaggregating data by sex, analysing the sexual division of labour, and understanding the gender disparities of access to and control over resources are basic components of a gendered approach to evaluation.

Example 18: Evaluation findings by Fantsuam Foundation on its ZittNet project

Communication infrastructure
The ZittNet Wireless Service signals are detectable in all the target communities. However, the reception depends on availability of appropriate hardware such as computers and alternative energy sources. Of the ten chiefdoms where the Fantsuam Foundation provides services, none of the women have these facilities in their homes, and have to travel to the Fantsuam Foundation or government offices before they can have access. The Fantsuam Foundation's clients and non-clients are equally affected by this lack of access. None of the communities have landlines, and this increases the cost of access for them.

Area of coverage of wireless service
All the communities studied were rural, and demographically, a higher percentage of rural dwellers in Nigeria are females. The distance that the women have to travel before they can reach the Fantsuam centre where they can use the available hardware is a disincentive. The poor accessibility of hardware facilities therefore shows a higher bias against women due to their higher rural population.

The ZittNet service is specifically targeted at other non-profit and community development related organizations, such as the General Hospital Kafanchan, Jagindi Health Clinic Kafanchan, Kaduna State College of Nursing, Kaduna State College of Education, Catholic Seminary, Madakiya, Anglican Seminary Zonkwa, Emir's Palace, Kafanchan, Chief's Palace Kagoro, Nehemiah Foundation Kachia and the Kaduna State University-Kafanchan Campus. In addition, private residences and several micro, small and medium enterprises, including internet cafes and telephone centres, have been connected to the system.

Relevance of types of services
The range of ICT services provided by ZittNet include: basic computer literacy training, photocopying and internet-assisted searches, wireless connectivity and video and camera skills training. The computer literacy training service is in the highest demand while the camera and video skills are the least in demand.

Affordability of wireless services
The demand for internet search is usually highest among both female and male youths who are seeking career or educational opportunities. For Fantsuam clients, the issue of

[45] This is also briefly discussed in the GEM manual on page 28.

affordability affects them indirectly: they said they do not need the access themselves, but rather for their wards and children for whom they have to pay to undertake photocopying and internet-assisted searches. A majority of the respondents (89%) indicated that the cost of these services at ZittNet was affordable.

The concern about affordability was commonly expressed when respondents were asked if they would like to have wireless access in their homes. High cost of bandwidth therefore makes wireless access relatively expensive for potential female users. The respondents' primary economic activity is subsistence farming which gives them rather low disposable income.

The Fantsuam Foundation is now involved in promoting innovative, cheap access to low cost, affordable technologies and applications that will be affordable for rural women users. The Wireless Africa Alliance for which Fantsuam is the country representative aims to achieve potential revenue and cost savings so that this will lead to an expanded use of ICTs among Fantsuam partner communities.

Language
Among the participants, 85% can understand spoken English, while 37% can read English. As English is the language of the internet, such information is largely unavailable to the participants. However, it is now possible to have one of the new versions of the Microsoft operating system in three major Nigerian languages, one of which is widely spoken in the target communities. However the low literacy level among the women participants limits their ability to use this new software. Within the Fantsuam Foundation, there are inadequate skills to enhance localisation of such software which will make the use of the wireless service more accessible for its clients.

Literacy levels
The population of non-clients studied have a higher proportion of literate and educated women (24 of them aged between 35 to 50, and 14 of them aged 19 to 25 were interviewed for this study). The first 24 are civil servants who were offered scholarships to attend the basic computer literacy course at the Fantsuam Academy. For 18 of them, this was their first opportunity to operate a computer, and six of them would like to return for a higher level of training, and they intend to use their skills for personal and business activities. Of the 14 younger women, they all wish to return to the academy for further training. Of the total 42 women who participated in this study, none had internet access in their homes, but all accessed information on the internet for career development and business opportunities. They all have an understanding of the value of information but physical access and ownership costs were major obstacles for them. As a matter of policy, Fantsuam's primary targets are women farmers and they have lower literacy levels than the non-clients, and therefore they are disadvantaged in accessing the wireless services.

What can be learned from the example above?

In analysing the evaluation data from a gender perspective, the Fantsuam Foundation went back to the gender and ICT issues that were identified in Step 2 of GEM—issues of access, which included issues of availability and affordability as well as issues of language and literacy; and issues of content, which includes issues of relevance. Are you able to see how the Fantsuam Foundation applied the analysis at three levels of:

- Roles, responsibilities and activities
- Resources and constraints
- Benefits and incentives?

Example 19: Evaluation findings by Dr Anupama Saxena and her team on Chhattisgarh's rural e-governance scheme

Evaluation findings

The *e-gram suraj* scheme with the help of Simputers in the hands of elected representatives has the potential to change the process of rural governance and thus to bring positive changes to the lives of the rural people, especially the poor and the marginalised. The evaluation research team appreciates the initiative taken by the state government. During the gender evaluation study, it was found that the *sarpanchas* were quite happy, enthusiastic and optimistic about the use of such technology at the *Gram Panchayata* level. But so far there has been no visible impact of the scheme in the lives of the people because the scheme is not implemented properly.

Information gathered during the gender evaluation of the *e-gram suraj* (rural e-governance) scheme showed that:

- Most of the Simputers which were provided to these elected representatives were not in working condition
- The Simputers that were deposited for repair have yet to be repaired
- Most of the Simputers have wrong, incomplete or outdated information
- No internet connectivity has been provided
- The text-to-speech feature of the Simputer cannot be used because the technology was inadequate to facilitate the use of this feature properly.

The evaluation also indicated that women *sarpanchas* are not able to participate equally in rural e-governance. Out of the total *sarpanchas* to whom Simputers are available and have thus attained a chance to participate in rural e-governance, only 33% are women. These 33% are also those who are elected from the reserved seats for women. Not a single woman is able to contest an unreserved seat. This clearly indicates that in the sphere of rural e-governance equal availability of technology to women can be ensured only through the adequate protection by government policy for the reserved seat allocations for women.

Secondly, the percentage of women who are actually using the Simputers and thus participating in rural e-governance is much less than the male *sarpanchas*. Nearly one-third (32.3%) of the male *sarpanchas* have used the Simputer to download information from it and 9.7% have transferred the data from their Simputers to the computers at *Janpad Panchayat* office through the thumb/pen drive and 16.1% have uploaded the data in their Simputers. Gender gaps are quite visible. Not a single woman has transferred data. Only one woman has downloaded information. No woman has uploaded data. A large number of male *sarpanchas* are using or have used Simputers for their personal work or for pleasure like playing games, calculating, listening to songs, etc. But only 40% female *sarpanchas* have shown any interest in these possibilities.

This unequal participation of women *sarpanchas* in rural e-governance is the result of prevailing social cultural discrimination against women. It is obvious when a gender analysis is conducted that examines the factors responsible for this poor participation.

Language, literacy and prior exposure to technology
The Simputer content has many English words. Only 29% of female *sarpanchas* have a working knowledge of English whereas more than 66% of the male *sarpanchas* possess this. The content of the Simputer is mostly in Hindi and 17% of men and almost 30% of women are not even fluent in Hindi. Most of them are fluent in the local dialect Chhattisgarhi. Hence, women are not able to understand the content in greater numbers than men. Language skills are closely linked with the educational levels of male and female *sarpanchas*. There is a wide gender gap for this indicator as 11.7% of women and 2.6% of men are illiterate. In formal education attainment, 20.5% men have received education higher than grade 12 while the percentage of women in this category is nil. Also, 17.9% men have received education up to the senior secondary level, while the percentage of women in this category is 5.9%. The evaluation showed that prior exposure to technology helps the *sarpanchas* in handling the Simputer in a better manner. On this indicator the gender differences are also very obvious as 39% men and 23% of women have some prior exposure to technology. This is because women are less able to move around in public spaces compared to men, and are unable to mix freely and learn about technology from men.

Content on the Simputer
Many of the women do not find the content of the Simputer useful and this is one of the reasons why they are not interested in using the Simputers. The main reason for not finding the content of the Simputers useful is that currently the content includes the information only related to *Gram Panchayatas* and most of the women are not able to actually perform the work of the *sarpanchas*. The other reason for not finding the content useful is the women's lack of command of English and Hindi, the two languages used for content on the Simputer.

Technical problems
There are many technical problems that *sarpanchas* face while using the Simputers. The problems include broken parts, problems with software, and discharged batteries. Women faced more problems because of their low education level, less exposure to technology and their lack of ease in public mobility.

Access to support system
Training: More than 53% of female *sarpanchas* faced problems during the training sessions. These included problems of transportation, lunch, language, disinterest, etc. Many of the women could not understand anything and 90% of the female *sarpanchas* who attended the training session did so with a male member of the family or with the *sachiv* (secretary of *gram panchayata*) because being women, they were not allowed by their families to attend the training session alone.

It was found that male *sarpanchas*, because of their better exposure to new technologies such as mobile phones and in some cases computers also, are more comfortable in understanding the functions of the Simputers. Moreover as they are better educated and have a higher proficiency in English and Hindi, it was easier for them to grasp whatever was explained during the sessions. Another advantage for men was that they can learn with fellow men after the training sessions, whereas women do not have any such chance and the training session is the only place where they do have a chance to learn how to use the technology. But the women found the duration of the training insufficient, and they were not able to understand the language of the trainers. All the trainers were male so women felt hesitant to ask questions.

There were no separate provisions for women for training hence they felt shy in asking questions. Training sessions should be well-planned and be very simple and supported by visuals wherever necessary. The duration of the training should be longer, and the language used should be easily understood with added efforts to simplify concepts used. One-to-one attention should be paid to female *sarpanchas* during the training. The lack of proper training certainly has resulted in the lack of interest in using the technology.

Maintenance: With new ICTs like Simputers, repair and maintenance services are very important. Because it is a new technology and because of the very little exposure of the users to any type of technology and lack of adequate training, it is but natural that the Simputers need repair very frequently. No support system at the local level has been provided for repair of the Simputers. The only option left to the *sarpanchas* at the time of the evaluation research for any malfunctioning of the Simputers is to rush to the Janpad Panchayata office that is located more than 30 kms away from some of the villages. At present, only 17.6% of the total Simputers are in working condition. There is a gender gap even in the provision of working Simputers to elected *sarpanchas*. 20.5% of Simputers used by male *sarpanchas* are in working condition and only 11.8% of Simputers used by female *sarpanchas* are in working condition.

Male domination in the public domain (rural governance)
This is a very important factor. There are clear indications that women are getting representation but they are not actively participating in rural governance. They are playing a proxy role for their family members. The representation of women has not automatically led to empowerment of women. After several years, it is a big challenge for women to function in formal spaces, dominated as they are, by men. They still face considerable disadvantages in their involvement in politics. These take the form of inadequate education, the burden of reproductive and productive roles—that women still have to play alone without support from their husbands, despite being elected representatives—a lack of financial independence or control of assets, and the barriers and constraints that women face from entrenched cultural and religious views. The evaluation survey showed that there was almost a negligible role of female *sarpanchas* in rural governance. This was very evident in a number of incidents where:

- The husband of the female *sarpancha* successfully denied the evaluation research team's access to his wife
- The husband of the female *sarpancha* would actually state that the villagers are accepting of the arrangement of husbands doing the work of female *sarpanchas*. This acceptance was confirmed when villagers themselves would name the husbands, and not the women who were elected, as *sarpanchas*, unless confronted with the name of the elected representative
- The husbands of the female *sarpanchas* who were doing the work as *sarpanchas* would keep insisting that they were the ones who should be interviewed as "their wives did not know anything"
- The female *sarpancha* herself would avoid meeting the evaluation research team members alone for the interview because it was the husband who did the work as *sarpancha*, and would be convinced that she was doing the right thing
- The female *sarpancha* was actually interested in working as *sarpancha* and felt that she could work well on her own but it was her husband who would never allow her to do so, and she felt very frustrated because of this.

The family members, the village community and even most of the women all seemed to be most comfortable with the situation described above. In the cases of some influential husbands, even the officers at *Janapad Panchayata* (bloc level rural self-government) do not insist upon the presence of the female *sarpanchas* during the official work and would allow the husbands to do all the work. Even in the unofficial gatherings of *sarpanchas*, the husbands represented most of the female *sarpanchas* and the few female *sarpanchas* who attended the meetings and made suggestions were not taken seriously.

This patriarchal culture of restricting women to the family domain restricts their access to new technology also. This is evident with another set of data. Male family members of 89% of total female *sarpanchas* (who do not own a mobile phone themselves) own a mobile phone. This clearly indicates that the family can afford a mobile phone but women who have been elected as *sarpanchas* are not considered "needy enough" to own one even though they are holding a responsible constitutional post. The reason is quite clear: the work related to the *sarpancha* is performed by the male member of the family, and in most of the cases, the husband. In one case, the eagerness of one female *sarpancha* to own a mobile phone of her own led to conflict with her husband and finally to divorce. "Independence" of the woman is closely associated with the availability of new technology and is becoming an issue of conflict between the male and female members within the families where gender inequality is entrenched.

Many incidents can be quoted to show how the same patriarchal culture is reinforcing itself in rural e-governance. Most of the women did not go alone to receive the Simputers, to attend the training session, to understand the functions of the Simputers or to deposit the Simputers when they malfunction. They have to depend upon the help of the male family members. The introduction of ICTs where patriarchal norms and beliefs are so entrenched in a community can thus also pose a potential threat to women in increasing their dependence on men and reducing their independence.

The introduction of ICTs can have other unintended consequences. Many of the women surveyed do not appreciate the potential of technology to facilitate the work from their houses or from their villages. For them, the necessity to visit the *Janpad Panchayat* office provides them with an opportunity to get out of their houses and villages and to feel a sense of power while meeting the concerned officers in their offices personally. According to most of the women, the potential of the Simputer (if exploited fully) would actually help the male members of their families to take control of all the work and would actually snatch away even the very little opportunity that female *sarpanchas* have to get out of their houses and villages, to meet others and to learn from others or be exposed to new lessons and experiences.

What can be learned from the example above?

Some basic questions guide the gender analysis of the evaluation research data that Dr Anupama Saxena and her team collected. These are:

- Where are the women (female *sarpanchas*) vis-à-vis the men (male *sarpanchas*) in the local context/situation?
- What access do women (female *sarpanchas*) have over existing resources and opportunities vis-à-vis the men (male *sarpanchas*)?
- What control or decision-making do women (female *sarpanchas*) have over existing resources and opportunities vis-à-vis the men (male *sarpanchas*)?
- What are the constraints, disincentives or challenges that women (female

sarpanchas) face in increasing their access and control over existing resources and opportunities?

Again, doing a gender analysis of the data means applying the analysis at three levels while interrogating gender. These are gender roles, gender relations and women's empowerment, and they need to be assessed at all of the following levels:

- Roles, responsibilities and activities
- Resources and constraints
- Benefits and incentives.

The findings of the evaluation are often organised based on the identified gender and ICT issues and the evaluation domains or specific areas of investigation for the evaluation. This was also the case for D.Net who provided their gender analysis of the evaluation data of the CLP based on:

- Selection of students for the CLP
- Access to ICT training
- Students' attitude
- Parents' attitude
- Teachers' attitude
- Attitude of VAB-NJ officials and sponsors of CLP.

To help staff and the CLP project team members be better able to do a gender analysis of qualitative data, D.Net developed the Gender Score Sheet tool. They found that this tool helped in interpreting the gender gap (differences in numbers and percentages between women and men or girls and boys) that is usually what is most visible in all projects. See Annex 1 for this tool.

4.3 Phase 3: Putting evaluation results to work

See GEM manual, pages 129–137.

This phase of the methodology focuses on how the lessons learned throughout the evaluation process can influence change within the organisation, the community and, if applicable, the wider gender and ICT movement.

4.3.1 Step 7: Incorporating learning into the work

See GEM manual, pages 130–137.

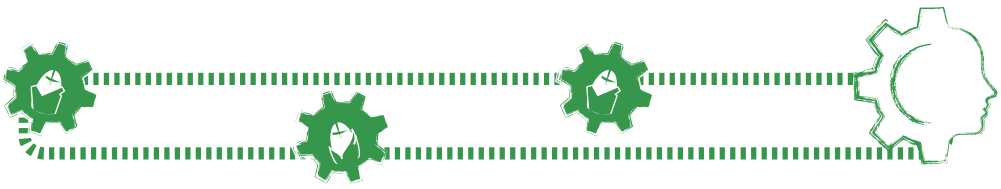
One of the evaluation values and principles of GEM is "learning for change" where importance is placed on using what has been learned. This means that learning from the evaluation findings must lead to action and one of the key success factors of any project is being able to incorporate lessons learnt into the work. The main purpose in Phase 3 and Step 7 of GEM is to figure out how to act on the results of the evaluation.

The first step is to review the project's **intended uses**. It is also important to investigate if there were changes in the **gender equality practices** of the organisation. To incorporate lessons into the work:

- Consider the evaluation as an ongoing and evolving process
- Be ready to make changes in the perspective and practice of the evaluation
- Be ready to review the project or initiative's objectives
- Take into account the lessons learned on gender and ICT issues.

There will be times when it is not possible to allow for critical reflection and "learning for change" in the process of implementation of a project for the following reasons:

- **Rigidity from the part of the internal stakeholders and project partners:** This factor often does not allow changing project activities emanating from the recommendations of interim reports, nor being able to change the project's objectives or expected deliverables.
- **Discomfort for the internal stakeholders and project partners:** It takes a lot of effort to incorporate any change in project activities, which are often found to be time-consuming and a distraction from other ongoing project deliverables.



The above are challenges that one must be aware of, and it is necessary to try and address them by ensuring full agreement on the intended use(s) of the evaluation findings. When considering results and findings:

- Take into account the gaps and omissions
- Consider the effectiveness of the methodologies that were used
- Were the results acceptable or unacceptable? Should more in-depth research take place? Were there any unexpected results?
- How did everyone feel about analysing the data from a gender perspective? Did the project gain because of this? Why?
- Were there other gender and ICT issues that need further study or research?

Lessons learned from the evaluation results and the evaluation process should lead to recommendations that will strengthen gender equality practices in a project and the organisation as a whole. This is why it is a priority to identify specific and explicit gender issues in the evaluation so that the lessons can influence the design and implementation of new projects, including a gender perspective in all steps of a project.

The lessons learned could also influence plans for ICT training and capacity-building with a gender perspective as well as the establishment of gender policies in organisations, development projects, communities, public offices, project administration, etc.

Example 20: Incorporating Learning into the Work—Fantsuam Foundation's Evaluation of ZittNet, Nigeria

The Fantsuam Foundation was able to incorporate learning into their work quite extensively, following through on the intended use that they had determined for the evaluation findings on ZittNet. Example 20 describes in detail how the Fantsuam Foundation managed to put into practice the "learning for change" principle and how it had used the findings from the evaluation.

The evaluation using GEM confirmed that all of Fantsuam Foundation's 4,000 microfinance clients live within the area covered by the wireless network. These female clients are largely subsistence farmers who also engage in various micro and small enterprises for additional income generation. This rural population of Fantsuam's clients represents less than ten percent of the total population of these communities. This shows that potentially, there is a large market for the Fantsuam's wireless service in these rural communities. However, low disposable income, combined with high cost of bandwidth, illiteracy, language issues and financial constraints, make the wireless services relatively inaccessible for the target population of Fantsuam's microfinance clients.

The wireless and other ICT services are currently not accessible to Fantsuam's target population of rural illiterate women. Reasons for their inability to access this source of information included lack of capacity to explore the potential of ICTs in their activities, lack of access at locations close to their homes, and lack of information in local languages.

To address some of the factors that prevent these women from accessing this source of information, a new support programme has been set up for these women. The Business Development Service (BDS) provides training, mentoring, access to relevant and timely agricultural information and seed funds for the women. Early results have shown that such a holistic support with its ICT component can result in poverty reduction at the family level. Fantsuam has reports of how internet-based information, when provided in appropriate format and language to its microfinance clients, has resulted in improved crop yields, improved earnings, improved family health and a more sustainable business enterprise.

Fantsuam Information Agent and proud owner of a successful maize crop

The BDS support has shown the need for a rural-based business incubation initiative that will provide mentoring, training, as well as relevant and timely agricultural and health information for its female microfinance clients. Such a holistic service that is built on Fantsuam's wireless network, ZittNet, will empower the Fantsuam Foundation's microfinance clients to meet the challenges of poverty that faces them.

The BDS effort is now supported by a localisation project for six of the local languages. This will facilitate access to online information for those women who are literate in their own languages.

The issue of cost of ownership and access is being addressed through an Africa-wide partnership that will develop innovative services that will enable community-owned wireless and Voice Over Internet Protocol (VoIP) services work for the poor.[46]

Fantsuam Foundation's focus for this project is to explore ways of making community-owned wireless work for the rural communities of Nigeria. As a member of the Wireless Africa Alliance, Fantsuam will support community-based operators to roll out their networks in ways that are financially sustainable and technically appropriate. The initiative will explore new network approaches based on open source software and open hardware plus innovative business models and services. The main technology

[46] An example of such a service is decribed here, http://wirelessafrica.meraka.org.za/wiki/index.php/Wireless_Africa_Home_Page.

focus will be on low-cost wireless devices [including easy to set up VoIP and Wireless Internet Service Providers (WISP) services], bandwidth management and billing systems. In addition, the Fantsuam Foundation is working on using high frequency shortwave radio voice communications for its outreach into remote areas.

The evaluation using GEM led to the development of new partnerships and services that aim to address the issues of inadequate infrastructure, technical capacity and cost of ownership which were identified as challenges faced by rural women in Nigeria. The ZittNet wireless network is more likely to achieve its poverty reduction objectives if it is deployed as part of a wider programme of support for rural female farmers. Such support must address issues of access, infrastructure, capacity-building and content, while providing opportunities for an increased awareness and participation of women in ICT-related activities in the Fantsuam partner communities. The women's cultural preference for voice communication over written or SMS modes suggests that voice communication should be one of the main determinants of the type(s) of technological infrastructure that is deployed for them.

What can be learned from the example above?

Being open to learning from the evaluation and the evaluation process is critical. In the Fantsuam Foundation's experience, the ability to present convincing arguments for change through the evaluation process and evaluation results was key. The evaluation conducted with the use of GEM brought about their own realisation of the limitations of the products and services they were providing to the rural women farmers, as well as the establishment of necessary and new partnerships and services so that there can be a wider programme of support for rural female farmers—one that is not only wider in outreach but also more integrated in terms of affordable and appropriate services and products provided.

Example 21: Incorporating learning into the work—The experience of Dr Anupama Saxena, Guru Ghasidas University, Chhattisgarh, India

In India, especially rural India, it is no secret that inequalities between men and women and between castes are deep. Strong traditional and cultural values dictate who has the power, and government attempts to include gender on the official agenda in traditional sectors like health and education run into multiple challenges. Dr Anupama Saxena, associate professor in political science and the director of the Women's Studies and Development Centre and her team of research students at the Guru Ghasidas Central University in Bilaspur have been investigating gender considerations in rural e-governance in India's poorest state, Chhattisgarh. Her research project, which investigated the inequalities between men and women in rural e-governance and exposed the reasons why they exist, has helped show that while 33% of government seats in rural governance are assigned to women, more often than not, it is their husbands who play the women's elected roles and speak for them.

But bringing this issue to government officials and talking about gender in rural e-governance is an ongoing and difficult task.

”The APC’s Gender Evaluation Methodology helped me observe the situation and present the gender gaps concretely,” she says. “GEM helped in setting up the indicators and correlating the information very systematically and in deriving conclusions that are factual and convincing.”

GEM helps make the right choices for research

Thanks to GEM, Dr Saxena was aware that it was important to include women researchers and field workers to get to the information she needed.

“After a few focus group discussions, we started to notice that the female *sarpanchas*, democratically-elected village heads, were not as open with the male interviewers as with females,” says Dr Saxena.

Stories of sexual harassment by government officers and bullying by husbands started to come out in the female-led discussions. With family members out of sight and women-only interview environments, the real stories started to emerge. Caste was also a concern for the research team. Focus groups leaders included a woman from the Scheduled Caste (SC) or “untouchable” group of the society.

“The women of this caste suffer from feelings of inadequacy,” Dr Saxena explains. “So having an interviewer from this caste made it easier for those interviewed to speak openly.”

Growing pains: Gender and ICT issues not yet taken seriously in India

Gender within the ICT sphere is a relatively new concept in India and government officials are not ready to accept the issues yet.

“We have invited government officials to come and listen to us, which they have done, but they are not yet convinced about the existence of gender issues in such a technical field,” Dr Saxena concludes.

The *e-gram suraj* (rural e-governance) scheme is a programme that can still be salvaged if the necessary changes are made to some design and implementation issues. And the programme could have potentially tremendous benefits for poor rural women who are local elected representatives. GEM has shifted Dr Saxena’s perspective on how to better engage with policy-makers. Instead of simply presenting material to them, she now engages them directly. For example: acting as a representative for the APC at the Internet Governance Forum in Hyderabad, India in 2008 and other prestigious ICT conferences in India where the GEM findings were also discussed, she was able to talk directly to political figures in the ICT sector and at least plant the seed that gender and ICTs in rural governance is an important and ever-growing issue.

She and her team also invited a top official to the university, who is an expert on the planning and implementation of new laws and policies. After a six-hour discussion, they still could not agree on gender inequalities within the ICT sphere, but the fact that the discussion went on for so long was seen as a good sign. Women’s organisations are also reacting positively to the GEM methodology and to the case of gender and ICTs. Dr Saxena, who has made a name for herself as an expert in the gender and ICT sphere over the years, explains that while it has been difficult to get her team’s stance taken

seriously, their presence in the debate is growing, as is interest by other organisations and the international community, largely thanks to the concrete results they were able to bring forth using GEM.

GEM inspires confidence and a way forward

The changes GEM brought can be reflected through the new confidence Dr Saxena and her research team members had gained thanks to GEM.

"My research team members grew so much in confidence while speaking with strangers and people from higher castes," explains Dr Saxena. "This was especially significant for two of my research students that were from lower castes."

The students also became more comfortable engaging in the research interviews with members of the opposite sex.

"Two of my female students were able to go into the field, something which was not easy for their families to accept."[47]

And the students have come a long way.

"One of my former research students who was from a lower caste is now a teacher herself. Another of my male researchers is now working with the government and does what he can to bring a gender perspective to his work."

As for herself, Dr Saxena states that "GEM has given me confidence on various different levels. It's a very good evaluation methodology to collect, analyse and present data on gender in the sphere of ICT and is extremely helpful for advocacy with the government."

"GEM has also helped me become a better teacher and advocate. Now I incorporate new networking tools like Ning (a social networking site) and Flickr (a photo-sharing site) and advocacy tools like digital stories (short videos using images and sounds to tell a personal story). Finally, GEM has helped me refine my concepts, research skills, terminology and advocacy strategies through its continued online support by its experts. Being supported by an international community of organisations who feel strongly about gender and ICTs has given me the strength to face the scepticism of government officials and members of the ICT sector."

Since using GEM, Dr Saxena's team has become much more outcome and impact-oriented.

"We realised that if we really wanted to change the minds of policy makers, we should have a sustained effort and engagement with the issue and policy makers," she says. "In order to do that, we need partners from different sectors, like civil society, something that had never occurred to us before using GEM."

GEM has transformed Dr Saxena's team's research approach from one that was purely academic into one that uses their research to make policy change and change the lives of hundreds of thousands of people for the better.

[47] The digital story developed by Afrina Tanzin of D.Net speaks of similar issues and challenges. See: http://www.genderevaluation.net/mygem/?q=video/looking_through_gem_new_vision_me_afrina_tanzin

What can be learned from the example above?

One must be open to self-critical reflection in Step 7 of GEM if "incorporating learning into the work" is to be done effectively. This is one of the values and practices of "learning for change" under GEM.[48] In Dr Saxena's experience, this self-critical reflection did not just happen at the end of the evaluation process but during the evaluation process. This was one of the biggest advantages of doing daily entries into a field researcher's diary and having frequent research team meetings. Because evaluators are people as well and have been socialised to conform to certain social expectations by the family, community and larger society, it is important to also process and analyse how these internalised gender-power dynamics within these individuals react with the gender-power dynamics internalised within respondents of the evaluation and within the situational context of these respondents.

Example 22: Incorporating learning into the work — D.Net's steps of action to improve its CLP

Assessing the findings of the study, D.Net found that the following measures could further enhance the Computer Learning Programme (CLP) in being more gender-sensitive and to improve the project's operation.

No.	Findings	Recommendation for action	To be implemented by
1.	**CLP class time:** Currently, CLP class is scheduled after or before the school's official time or during leisure/free periods. This schedule is forcing students to come early or stay back after school, which is particularly difficult for female students.	• School management can allow a slot for CLP class in regular academic class time. It will encourage more girls' participation in the CLP course • CLP teachers can also arrange for extra computer classes.	• School management • Computer teacher.
2.	**Practice opportunities:** 235 regular and graduate students out of 321 said that they did not have sufficient opportunities to practise their new computer skills regularly. Yet, regular	• School authorities could relieve the computer teacher from additional classes so that she / he can give additional practice time for both current and graduate students. In case of	• School management • Computer teacher • CLP project team.

[48] For more information, see pages 19–22 of the GEM manual.

No.	Findings	Recommendation for action	To be implemented by
2.	practice is necessary to retain what is taught in the CLP course.	unavailability of the computer teacher, skilled graduates can be assigned to provide technical support during practice periods • Apart from this, the CLP project team can also redesign their course schedule to include allocated time for practice during training sessions.	
3.	**Increase course duration:** The research team visited 30 CLCs and found that every CLC was trying to cover everything that was intended to be covered by the CLP course. But in most of the cases, it was not possible due to their engagement in academic classes, electricity failures or internal exam schedules of respective schools.	• The focus group discussion conducted with the students raised the recommendation that to provide effective training, the CLP course duration can be increased to at least 50 to 60 hours considering electricity failures and teacher involvement in the conduct of other classes. Additional practice sessions should be included in the course schedule.	• School management • CLP project team.
4.	**Ensure class duration and extra care for weaker students:** Ten out of thirty schools are unable to find a continuous two-hour segment for the computer class. This is detrimental for the learning of the students. Some students need time to cope with new information, knowledge and skills but with the	• School management should take necessary steps to allow uninterrupted computer class time for the students. The CLP team can suggest to teachers that they pay extra attention to weaker students to develop their understanding and skill level. They should give more practice time to weaker students.	• School management • CLP project team.

No.	Findings	Recommendation for action	To be implemented by
4.	class time schedule, there is no scope to provide extra attention to the weaker students.		
5.	**Teachers' refresher training:** Refresher training sessions can help teachers by keeping them updated on new software and computer applications. This was a recommendation by the teachers themselves.	• Refresher training sessions can be organised by the CLP project team so that teachers can be up-to-date with new computer applications and also expand their knowledge on hardware-related issues.	• CLP project team.
6.	**Gender sensitisation in CLP project implementation:** Female students have noted many challenges with regard to class time, practice time, class duration and sex of computer teacher, all of which create difficulties in their participation in the CLP course.	• Gender sensitisation workshops can be organised for teachers by the CLP team. Organising additional sessions to learn how to address gender issues during the teacher training schedule will be helpful in enabling a higher level of gender sensitivity to the gender issues faced by the students who undertake the CLP course.	• CLP project team • GEM team of D.Net.
7.	The CLP project team have not organised a sufficient number of activities to sensitise policy makers about the importance of addressing gender issues in ICTD projects.	• The CLP project team should have specific activities to influence policy makers to be gender-sensitive and consider gender as an issue during policy formulation. They can organise gender sensitisation workshops for policy makers, or they can publish articles	• CLP project team • D.Net management.

No.	Findings	Recommendation for action	To be implemented by
7.		in newspapers on the importance of considering gender issues in ICTD projects. D.Net management can also be more proactive in increasing policy makers' awareness about gender issues and the role they play in empowering women through ICTs.	
8.	Quality of the CLP training hampered due to use of old computers at the Computer Learning Centres (CLCs). The average number of computers in CLCs are 4–5 units which is not adequate if there are 10–12 students in a class.	• To ensure quality of training, the CLP project should try to increase the number of computers along with the replacement of old computers so that more students can get real opportunities to learn how to use the computer. The CLP team may apply to the sponsors and to the Ministry of Education for more and new computers. The CLP team may also encourage VAB-NJ for more donations to purchase updated computers.	• CLP project team • VAB-NJ • Sponsors.
9.	Students wanted to learn more about the computer but could not find appropriate books. Literacy curriculum "Esho Computer Shikhi" includes only basics.	• The CLP team can send a list of computer-related books along with their sources which will help students in their advanced learning.	• CLP project team.

No.	Findings	Recommendation for action	To be implemented by
10.	Teacher dropout is a problem for CLP project implementation. Sometimes training is hampered due to lack of computer teachers.	• CLP management should regularly follow up so that they can implement a back-up plan in a timelier manner • The CLP team also can train more teachers as back-up.	• CLP project team • School management.
11.	Teachers are very busy with other classes and other part-time jobs. Often these are the male teachers who have other activities outside of the school. This affects the quality of training.	• CLP management can convince the school authority to assign more teachers, especially female teachers as trainers.	• School management.
12.	Electricity supply problems are the most critical problem for the CLP training sessions. Often, students spent their class time waiting for the electricity.	• Alternative power sources should be arranged so training can continue during electricity supply problems.	• School management • Sponsors.
13.	VAB-NJ and the CLP project team have no mandate to convince sponsors to select girls' schools even though ensuring greater female participation in the ICT sector to create computer training opportunities for girls is necessary.	• VAB-NJ can play an important role here by sensitising sponsors to establish more CLCs in girls' schools • CLP team management can also raise more local funds to establish CLCs in girls' schools.	• VAB-NJ • CLP project team.

Apart from the above, D.Net immediately took steps to improve the design and content of the different checklists it was using for the implementation of the CLP. These included:

School selection checklist: Schools were pre-selected for establishment of the CLC by sponsors. However, the CLP management team now visits the selected school and prepares a score sheet based on the school selection criteria. These include factors such as school location and school infrastructure. Infrastructure is important for the security of the computers and other equipment. Apart from this, students' public examination results, the number of students, the quality of teachers, the availability of electricity and the willingness of school authorities to have the CLC at their school are all issues considered by the CLP management team. The CLP management team now also actively encourages sponsors to establish CLCs at girls' schools. So, when they do get opportunities to select the school for establishing a CLC, the CLP management now considers whether it is for girls or boys. When they find that the school is for girls, they select it (see Annex 2 for this checklist).

Teacher selection: The CLP has developed a checklist for teacher selection. Previous conditions were:

- If the teacher is a computer teacher at that school
- Other teachers who know how to use the computer (if there is no computer teacher)
- Science teachers (if the first two options are unavailable)
- Other teachers who wanted to know about the computer and who are young.

Now, the CLP team also considers female teachers as trainers and also requests that school management selects a female teacher for leading the CLP training.

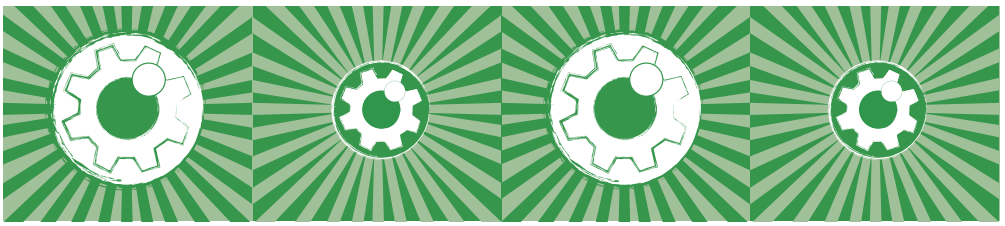
Monitoring and evaluation format: The CLP team has developed their own monitoring checklist for monitoring the CLCs' activities. Some additional questions and a table to capture gender-disaggregated data were included so that the CLP team can obtain a more realistic picture of the CLCs' activities and take the necessary steps (see Annex 3 for this checklist).

What can be learned from the example above?

"Incorporating learning into the work" does not have to happen only after the evaluation is completed or once the evaluation results are obtained. D.Net incorporated learning into the work during the evaluation process by producing what the team thought would be useful tools to strengthen the implementation of the CLP even before the evaluation was completed. This is a good practice and it means that the design of the evaluation and implementation can continuously adapt and evolve as learning is incorporated into the work.

4.3.2 Changes in gender equality practices in the organisation

It is possible to institutionalise changes in an organisation by developing gender equality policies to be applied in the daily work and in all of its projects. Many organisations now have their own gender policies. A number



of digital stories developed by the GEM practitioners talk about institutional changes in mainstreaming the commitment to address gender issues.[49]

Organisations can also change their own ICT practices, fostering change according to internal needs and demands, and working for equal opportunities and equity in ICT access, use and benefits. One of the objectives of GEM is to use evaluation findings to inform ICT policy advocacy work. Evaluation results can help to spot areas of work that require additional research, or share best practices and lessons learned. Evaluation results can also be used for fundraising, as they can demonstrate the need for resources to be committed to gender and ICT work.

4.3.3 Planning a communications strategy to effectively communicate the evaluation results

It is important to develop a communications strategy to inform the different intended users of evaluation results because this is essential to a "learning for change" culture which leads to critical reflection, participation, inclusiveness towards those who contributed and those who could benefit, and taking action for self and social change.
A communication strategy should help us:

- Tell our story with honesty
- Inform our stakeholders of the evaluation findings and the follow-up action, and to allow full access to these findings for those who contributed and who could benefit from the evaluation
- Establish legitimacy for the project or programme, recognising both existing gaps in implementation and strengths
- Deliver our mission
- Adopt ethical practices in the management of the project or programme (transparency, critical reflection, participation).

There are key elements to consider in the development of a communication strategy.

First and foremost, objectives should be clear.

What is the context and who is our audience? Is there only one audience, or should there be differentiation between communications products according to the audience we want to target?

What kind of message do we want to communicate? There are strategic considerations to keep in mind if we want to make our message consistent, interesting and relevant for the longer-term.

What sort of tools and platforms are we going to use to communicate our message? Only publications on paper? Only online communications? Radio? A combination of several media? Our target audience and its context will help us to decide.

These questions should be answered clearly before making the necessary decisions surrounding a communication strategy:

- What are the available communication tools?
- Who produced the communication materials?
- Which of these tools are most effective?
- What tools would be effective?
- Who uses the materials?

The objectives should also be clear. What is to be accomplished?

- Simple awareness-raising?
- Deepening understanding?
- Advocating policy/law change?
- Launching a campaign?
- Making a call to action?
- Presenting evidence about a case, a situation, etc.?
- A combination of the above objectives?

[49] See digital stories by John Dada of the Fantsuam Foundation, http://www.genderevaluation.net/mygem/?q=video/time_move_john_dada and by Fatema Begum Labony of D.Net, http://www.genderevaluation.net/mygem/?q=video/my_journey_cocoon_butterfly_fatema_begum_labony

When planning a communications strategy, research to confirm the target audience in order to plan for a successful campaign. The objectives of the communication strategy also have to be clear and it is important to keep messages succinct and simple, just a few of them, and always look for a "sticky message" or catchy slogan (one that will remain in the minds of your audience) that can add personality or uniqueness to the message. It is important to make the ideas stick. Special characteristics of your message should be:

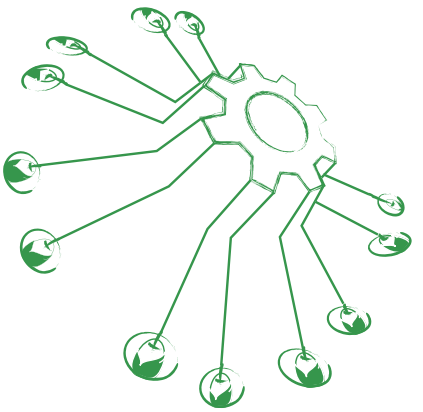
Simple for the core idea
Unexpected so that you can grab your audience's attention
Credible so that your audience will find the message believable, and so will trust it
Concrete so that your audience can easily understand it
Emotional so that your audience will care
Stories so that your message is engaging.[50]

Telling a story that will show evaluation findings or the success of the work for gender equality in rural ICTD projects should include:

- Narrowing the message
- Thinking about what's new or different in the story
- Writing "like you talk" by using simple language to tell facts and findings
- Making the story human, simple and relevant
- Painting a picture that one wants to show and share with others.

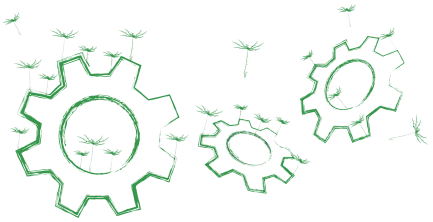
Good storytelling helps to communicate evaluation results through real life stories or case studies. The story should show real people responding to life's many challenges. One can make the story more interesting by focusing on people at the cutting edge of survival, in marginalised communities or in places or situations where ICT access and use can open the way to crucial opportunities for people or communities to solve their needs or problems.

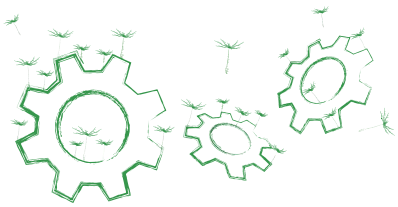
Nowadays, there are many tools and platforms from which to choose and think about the best way to fulfil communication objectives. Think carefully which tools and platforms will work for the specific skill set, project and audience and whether they are feasible and cost-effective. Research, think and innovate. A communication strategy needs financial investment, so it is better to plan it well and decide what is best after studying the target audience and the kind of message to be delivered rather than using ad-hoc strategies.



[50] The Heath brothers give us six qualities of sticky ideas. They have given us a cute little acronym to help them stick: SUCCESs (Simple Unexpected Concrete Credible Emotional Stories). For more information on resources produced by Chip Heath and Dan Heath, see http://heathbrothers.com/ . Alse, see: Chip Heath & Dan Heath *Made to Stick: Why Some Ideas Survive and Others Die* (New York: Random House, 2007).

SECTION 5:
ONGOING CHALLENGES





SECTION 5: ONGOING CHALLENGES

Often ICT-type projects face limitations in what they can possibly do to address the root causes of gender and ICT issues in a particular locality and context. Unfortunately, this also often means that whatever good work can be brought about through ICTs can easily be derailed by the root causes of these problems. Here is one sad example of how the good work achieved by Nigeria's Fantsuam Foundation in a very difficult setting was completely lost.

APC and the Fantsuam Foundation first came into contact when Fantsuam won the 2001 APC Africa Hafkin Prize for women-centred communication and technology initiatives. At the time, Fantsuam ran a small microcredit scheme and had introduced computer training for their borrowers. Kazanka Comfort, who ran the foundation, told us that her dream was to eventually see women in all the local communities in the Nigerian city of Jos linked up by email so that when there were outbreaks of sectarian violence the women could email each other and get help or diffuse the violence.

The women of Jos

Since 2001 Fantsuam has used technology to alleviate poverty. In an area where car batteries are typically used to run anything electrical, Fantsuam set up a high tech training academy, a local wireless network and began to provide internet access to thousands of people.

Since 2004 Fantsuam has used APC's Gender Evaluation Methodology to evaluate the extent to which their efforts are changing the lives of women in their communities. However, in the 2010 outbreak of sectarian violence in Jos, Fantsuam has had to help bury 287 dead, almost all women and children. Women are culturally respected as the givers of life and Fantsuam's John Dada blames deepening poverty and economic alienation for the cultural reversal. He sees the extension of GEM into the larger community as a potential solution.

KAFANCHAN, NIGERIA 11 March 2010
by John Dada, Fantsuam Foundation for APC

Within a space of two months, from January, sectarian strife has ripped through our communities in Jos, Plateau State. The first violence was city-based and left hundreds of persons maimed or killed and livelihoods and homes destroyed. Then reprisal killings took over in the midnight hours of 7 March 2010 attacking three rural communities. A mass burial took place the day before yesterday and body counts are close to three hundred with over 80% of them women and children. It is ironic that in this month of the Celebration of Women's Day, such atrocities are being visited on innocent women and children.

We had a GEM story of change [stories which illustrate the impact GEM has had on a particular person or community] to share about a young woman of 21, Zugwai, and how she finally found the courage to use an existing grievance procedure to challenge sexual harassment in her place of work (the grievance procedure itself was an outcome of a GEM process in her organisation). Her courage was an eye opener for her colleagues and she reports that she has felt safer and more confident in her work since the issues were resolved, and that her male colleagues too had expressed appreciation to her for helping to stamp out a near-cultural acceptability of sexual harassment.

The recent violence visited on our communities however has challenged Fantsuam Foundation to re-examine Zugwai's story of change and contextualise it. Zugwai's victory pales in significance when viewed through the prism of the expression of disdain, hostility and utter disrespect for women as seen in the recent massacres in Jos.

It has been a global experience that in war situations, the greatest casualties are always women and children. This was starkly brought home to us this week. In the midst of the anguish, weeping and wailing, I had the privilege of seeing the resilience of the womenfolk when a pregnant mother began to experience birth spasms. The women quickly mobilised and within a couple of hours a new baby was born in the Fantsuam compound, and the mother was well enough to go back home.

The tragedy of the recent killings in Plateau State runs deep, exposing a dying cultural value of the sacredness of human life and especially of the respect for women as givers

of life. When a cultural reversal occurs as a result of deepening poverty and economic alienation to the extent that the fabric of communal sanity is destroyed, GEM takes on a deeper meaning.

GEM is a tool whose ultimate meaning is the preservation of human life and dignity. A community that loses that sense of sanctity of human life is clearly on a suicide slope. When women who are culturally regarded and respected as sources of life are brutally murdered along with young children, the future of entire communities and nations is truncated.

To espouse GEM principles therefore demands a re-examination of the basic values of equitable living. No community can thrive on inequity for long; when traditional values that enhance equity are jettisoned, there are no winners and the entire nation suffers irreparable damage to its psyche and its physical existence.

It is no longer sufficient for the Fantsuam Foundation to be satisfied that it has mainstreamed gender, or that we have individual stories of change to share. We have to take a long and hard look at the social milieu in which we operate. Given the sociocultural realities of our host communities, we are now asking how we can get GEM fast-tracked and deployed in the larger communities. For us, GEM has become a lifeline, a distant ray at the end of the tunnel, a tool to get our communities out of this quagmire.

Source:
Adapted from "GEM in hard times: Sectarian violence in Nigeria can be beaten", article written by John Dada for the APC News. See http://www.apc.org/en/node/10012/.

GENDER SCORE SHEET TOOL DEVELOPED BY D.NET

Note:
List of abbreviations:
CLC
Computer Literacy Centre

CLP
Computer Literacy Programme

D.Net
Development Research Network

VAB-NJ
Volunteers Association for Bangladesh, New Jersey

SMC
School Management Committee

GSS
Gender Score Sheet

GEM methodology emphasises collecting qualitative data in order to be better able to answer the question of why something occurs. However, sometimes it is difficult to reach a conclusion with only qualitative data and the interpretation of qualitative data often requires a GEM expert or a gender expert. To overcome this challenge, D.Net's Computer Literacy Programme (CLP) evaluation team developed the Gender Score Sheet (GSS), a measurement tool which can complement GEM. This tool can assist the project team to measure the gender gap in their project activities through the gender lens. One of the major objectives of the GSS is to identify the extent of the gender gap and where more intervention is needed. The CLP team intended to develop guidelines to help identify gender and ICT issues along with relevant examples so that ICTD project managers can identify gender and ICT issues according to their context.

The GSS works with quantitative as well as qualitative data. The GSS has developed a formula which can convert qualitative data into a quantitative format for measurement.[51] There is still scope for further improvement of the GSS. The successful use of the GSS depends on acceptance of the CLP's evaluation study report.

How far is the CLP project gender-sensitive?—Measuring with the Gender Score Sheet

The GSS sets three scales to measure different types of indicators so that the CLP

[51] D.Net's CLP team will be developing guidelines to help the ICTD project teams analyse data from a gender perspective within their own context. The forthcoming manual will include adequate examples so that ICTD project teams can have a better understanding and grasp of the process. Please check with D.Net directly for further updates.

project team can assess their minor activities as well the major one. The first scale presents the overall GSS ranking. The second scale attempts to rank the male-female ratio of different indicators to discover the exact state of gender consideration. The third scale attempts to rank percentage values.

Scoring scale

1. Ranking:
   0 = Not satisfactory
   1 = Poor
   2 = Satisfactory
   3 = Good
   4 = Very good
   5 = Excellent

2. For female-male ratio:
   0–10 = 0
   11–20 = 1
   21–30 = 2
   31–40 = 3
   41–50 = 4
   51 and above = 5

3. For percentage:
   1%-20% = 0
   21%-40% = 1
   41%-60% = 2
   61%-80% = 3
   81%-90% = 4
   91% and above = 5

The following three tables show how the GSS was used by D.Net's CLP team to evaluate the CLP.

Part A: Score sheet for CLP project outcome

Table A-1: Score sheet for CLP project outcome

Indicator	Findings	Data source	Score	Out of
Female-male ratio in number of students per batch	50:50	• Interview • Document review.	4	5
Percentage of the CLCs where male and female students sit together in the CLP class	Students said in focus group discussion that generally boys and girls do not share the same computer, with very few exceptions.	• Observation • Focus group discussion.	1	5
Percentage of CLCs where teachers arrange favourable time for female students	40%	• Interview.	1	5

Indicator	Findings	Data source	Score	Out of
Female-male ratio of having additional practice time during the course	80%	• Interview.	5	5
Female-male ratio of having additional practice time after the course	64%	• Interview.	5	5
Female-male ratio among those who share information	57%	• Interview • Focus group discussion.	5	5
Effort to encourage others to enrol	95%	• Interview • Focus group discussion.	4	5
Female-male ratio of willingness to practise	37:63	• Interview • Focus group discussion.	3	5
Female-male ratio of willingness to have own computers	58:42	• Interview.	5	5
Female-male ratio of accessing network opportunities	Thirteen CLCs out of thirty are connected to the internet. Research team found some male students made friends by Yahoo! Messenger but did not find any girls who made friends by using the internet.	• Observation.	1	5

Indicator	Findings	Data source	Score	Out of
Difference in community attitudes towards computer-trained girls and boys	Students said during focus group discussions that their parents and relatives appreciate their computer skills. Their parents (including girls' parents) are very happy about the CLP course.	• Focus group discussion.	5	5
		Total	39	55
		Percentage score	71%	
		Ranking	**Good**	

The rank for the percentage score is three because the percentage score falls within the 61%–80% range. A rank of three means "good" under the GSS tool.

Part B: Score sheet for CLP stakeholders

Table B-1: Score sheet for CLP project management

Indicator	Findings	Data source	Score	Out of
Changing attitudes towards gender issues and learning mistakes in project implementation by the CLP team	At the beginning of the project the CLP team did not consider a gender perspective for their project implementation process.	• Interview with project team • Document review.	3	5

Indicator	Findings	Data source	Score	Out of
	But now, they are considering gender issues in developing new activities for their project.			
The CLP is working to raise awareness among policy makers on the gender divide in access to ICTs	The CLP team could create awareness about ICT in education issues. During this activity they could not consider gender issues very seriously.	• Interview with project team • Document review.	2	5
The CLP is advocating to form relevant national policies (education policy, ICT policy, women empowerment policy etc.) in creating better enrolment opportunities for females	The CLP team could do advocacy to form policy in creating better enrolment opportunities for females. The research team did not find much initiative with regards to this issue.	• Interview with project team • Document review.	1	5
Trainer selection process is consciously gender-sensitive towards female teachers/trainers	The CLP project always wants to train two teachers (one male, one female) as trainers but sometimes, the school authorities cannot assign more than one teacher.	• Interview with project team • Document review.	4	5

Indicator	Findings	Data source	Score	Out of
Teacher training content and training methodology is gender-sensitive	The content of the CLP-provided teachers' manual is not highly gender-sensitive. But the CLP team encourages teachers to give equal or more attention to female students. Apart from this, the research team did not find any gender conflicting issues in the training manual.	• Interview with project team • Document review.	3	5
Does the CLP team guide the selection of students in maintaining a male/female ratio?	The CLP team provides guideline to select males and females in the same ratio for the class. They also monitor this issue.	• Interview with project team • Document review.	5	5
Focus of gender issues in media publications	During the documentation review the research team found that the CLP team was focusing on gender issues in their publications. They are using photographs and case	• Interview with project team • Document review.	4	5

Indicator	Findings	Data source	Score	Out of
	studies of girl students.			
		Total	22	35
		Percentage score	63%	
		Ranking	**Good**	

The rank for the percentage score is three because the percentage score falls within the 61%–80% range. A rank of three means "good" under the GSS tool.

Table B-2: Score sheet for VAB-NJ

Indicator	Findings	Data source	Score	Out of
They are prioritising establishing and equipping girls' school over boys' schools or over co-education schools	Some officials from VAB-NJ are concerned about gender issues, but this is not in their mandate.	• Interview.	2	5
They share with VAB-NJ sponsors about prioritising girls' schools in the process of identification of venue for a CLC	0% (Respondents indicate that it is not their mandate).	• Interview.	0	5
They can motivate non-resident Bangladeshis (NRBs) to select more girls' schools for CLC	0% (All responded negatively).	• Interview.	0	5
		Total	2	15
		Percentage score	13%	
		Ranking	**Unsatisfactory**	

The rank for the percentage score is 0 because the percentage score falls within the 1%–20% range. A rank of 0 means "not satisfactory" under the GSS tool.

Table B-3: Score sheet for CLP sponsor

Indicator	Findings	Data source	Score	Out of
Sponsor chose girls' school for CLCs	When non-resident Bangladeshi (NRB) sponsors choose a school they try to choose from their own village. Some sponsors intentionally choose a girls' school as they feel that this can create a positive difference.	• Document review • Interview with project coordinator.	3	5
For those who sponsored both boys' and girls' schools, is their level of contribution to each school the same or did they prefer the girls' school rather than boys' school?	CLP has 30-40% sponsors who sponsored more than one school. Some of them intentionally sponsored a girls' school.	• Document review • Interview with project coordinator.	2	5
		Total	5	10
		Percentage score	50%	
		Ranking	**Satisfactory**	

Table B-4: Score sheet for school management

Indicator	Findings	Data source	Score	Out of
Male-female ratio of participation in extracurricular activities	70:30	• Interview.	5	5
Changing attitudes towards gender issues and learning from mistakes in project implementations by teachers	Headmaster and School Management Committee (SMC) members said that they found positive changes in attitude of CLP teachers towards female students.	• Interview with Headmaster & SMC.	3	5
		Total	8	10
		Percentage score	80%	
		Ranking	**Good**	

The rank for the percentage score is three because the percentage score falls within the 61%–80% range. A rank of three means "good" under the GSS tool.

Table B-5: Score sheet for overall performance

	Score	Out of	Percentage (%)
Score sheet for project management	22	35	62.9%
Score sheet for VAB-NJ	2	15	13.3%
Score sheet for sponsor	5	10	50%
Score sheet for school management	8	10	80%

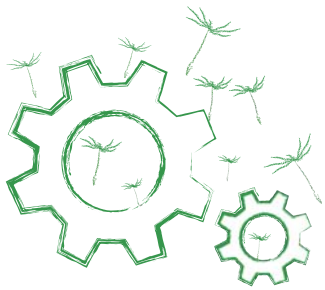
Table B-5: Score sheet for overall performance

	Score	Out of	Percentage (%)
Total	37	70	52.9%
Percentage score			53%
Ranking			Satisfactory

Breaking the results down, the GSS shows that the CLP project's outcome score is 39 out of 55 or 71%, which is "good" according to the GSS scale. However, the average of project stakeholders' gender sensitivity score is 53%. This means that the project's outcome score is higher than the project stakeholders' gender sensitivity score. This implies that the community's (school management, students and parents) gender sensitivity is higher. Interestingly, the average score of the school management's gender sensitivity is 80%, which is the highest. Thus, the score shows that there is room for improvement in the implementation of the project. Project management scored 22 out of 35, which is 63% and according to the GSS scale, this score is also ranked as "good". But the VAB-NJ scored only 2 out of 15, which is 13%. According to the GSS scale, they are ranked as "unsatisfactory". Sponsors scored 5 out of 10 and this score is ranked as "acceptable". As mentioned earlier, the school management scored 8 out of 10 and this score is ranked as "good." From the different scores, a conclusion can be made that the school management and the project implementation team are gender-sensitive, but the VAB-NJ needs further gender sensitisation as this cohort scored only 13%. More work may also be needed with the sponsors.

What do you need to consider when using this tool?

You may have already noted that any rank below two (satisfactory) would be considered unsatisfactory. The value assigned to the ranking one is unsatisfactory while the value assigned to zero would have to be revised, to maybe "dismal" or "gender blind". These rankings and values could further be matched to GEM's analytical framework and Longwe's suggested levels of Women's Empowerment which are: "welfare", "access", "conscientisation", "mobilisation" and "control". The tool does not provide the gender analysis though seems to be sufficiently useful to help point to areas where further work or attention is needed to increase the gender sensitivity in the implementation and re-design (if necessary) of the project.



D.NET'S SCHOOL SELECTION CHECKLIST

Computer and ICT learning centre selection school based telecentre
(We assure you that the information provided will be used only for selection purposes)

Note:
List of abbreviations:

CLC	Computer Literacy Centre
CLP	Computer Literacy Programme
D.Net	Development Research Network
VAB-NJ	Volunteers Association for Bangladesh, New Jersey
SMC	School Management Committee

1. Questions related to the institution

1.1. Name of the institution: _____ 1.2. Telephone No.: _____

1.3. Name of the institution head: _____ 1.4. Telephone No.: _____

1.5. Village/ward: _____ 1.6. Post: _____

1.7. Thana: _____ 1.8. District: _____

1.9. Location (please mark with an "**x**"):

Rural area		Semi urban		District headquarters		Metropolitan area	

1.10. Type and management of the institution (please circle):

Type	Primary school	Secondary school	Higher secondary school	Madrasa (Islamic education)
Management	Government	Autonomous	Private	Other
Type of school	Boys	Girls	Co-education	Different shift for boys and girls

1.11. Source of funding:

	Source of funding	Percentage of annual budget
1.		
2.		
3.		
D.Net comments (filled in by D.Net team):		

1.12. Description of current and completed project (excluding infrastructure):

Project/ programme name	Duration (month/year)	Summary of programme or project	Name and address of individual sponsor/funding organisation
1.			
2.			
D.Net comments (filled in by D.Net team):			

1.13. Number of teachers (male/female):

Male teachers	Female teachers	Total	Number of computer teachers

1.14. If there is no computer teacher, does the School Management Committee (SMC) plan to recruit a teacher in the near future? If so, when?

_____

1.15. If there is no female computer teacher, does the School Management Committee (SMC) plan to recruit a female computer teacher in the near future? If so, when?

_____

2. Computer Literacy Centre (CLC)–Establishment/operation/sustainability

1. Are you interested in establishing a CLC in your school?	Yes ☐ No ☐
2. Why are you interested in establishing and running a CLC at your school?	
3. How will your institution benefit from establishing a CLC?	
4. How will people in your community benefit from the CLC in your school?	

5. How long do you wish to run this CLC? Why?	
6. Write the name and designation of one of your colleagues who could run, manage and plan for the CLC.	
7. How will you run this CLC if your donor organisation stops funding you? Will you…	
a) Take fees from the students?	Yes ☐ No ☐
b) Collect donations from the community?	Yes ☐ No ☐
c) Collect donations from the School Management Committee (SMC)?	Yes ☐ No ☐
d) Find another way? (if yes, please explain)	Yes ☐ No ☐ _____ _____

3. Student information

3.1. Students by class:

Type	Class								
	Level 6	Level 7	Level 8	Level 9	Level 10	Level 11	Level 12	Level 13	Level 14
Male students									
Female students									
Total									

3.2. How often do students get tested and receive feedback from teachers?

Monthly	Quarterly	Once in four months	Half yearly	Yearly

3.3. Expected number of students to benefit from this CLC in a year?

Less than 20	20–50	50–100	100–150	150+

3.4. Information on junior level (Level 8) scholarships:

Year	Total students	Seat for junior scholarship exam	Received scholarship	Percentage
2008				
2007				
2006				

3.5. Information on public exam results [(Secondary School Certificate (SSC), Higher Secondary Certificate (HSC)]:

Year (last two years)	Number of examinees	Total graduated	Percent graduated	Grade/ number	
2008				A+	
				A	
				A-	
				B	
				C	
2007				A+	
				A	
				A-	
				B	
				C	

4. Social & economical condition of the area

Wealthy area with all facilities		Economically solvent		Middle income area		Under developed area		Poor area	

5. Management related information

5.1. Does the school have School Management Committee?

a. Yes ☐ No ☐

If yes, how many SMC meetings took place this year? How many meetings were scheduled in your work plan?

_____

5.2. Did the School Management Committee reward any teachers for their excellent performance last year?

a. Yes ☐ No ☐

5.3. Did the School Management Committee reward any students for their excellent results?

a. Yes ☐ No ☐

5.4 If you start computer training sessions what will your class schedule be?

Before school hours (8:00 – 10:00)		During school hours (10:00 – 16:00)		After school hours (16:00 – 18:00)		Evening (after 18:00)	

5.5. Do you plan on providing computer literacy courses to people in the community?

a. Yes ☐ No ☐

6. Infrastructure

6.1. Does the school have a power connection?

a. Yes ☐ No ☐

6.2. What is the average availability of electricity each day?

	6:00 – 14:00	14:00 – 18:00	18:00 – 23:00
How many hours is power available per day/ period?			
Is an alternative power source available if there is a regular power cut for more than one hour? (yes/no)			
If yes, what are the alternatives?			
How long would it take to switch to a new power source?			
D.Net comments (filled in by D.Net team):			

6.3. Room availability:

a. Separate room for teacher ☐
b. Separate science laboratory ☐
c. Separate computer laboratory ☐

6.4. If there is no computer lab, is the school authority interested in arranging for a separate furnished computer lab?

a. Yes ☐ No ☐

6.5. Does the school have a sanitary toilet for teachers and students?

a. Yes ☐ No ☐

6.6. Is there a tube well or another reliable drinking water supply?

a. Yes ☐ No ☐

6.7. Is there a security guard at the school?

a. Yes ☐ No ☐

6.8. How many hours can the teacher allocate for computer training?

_____

6.9. Source of funding for equipment, services and activities to establish a Computer Literacy Centre (CLC):

Equipment, activities and services for a CLC setup	Desired equipment for the computer lab	Planned source of funding	How long will it take to obtain the equipment?
Desktop PC (multimedia, LAN card, CD burner)			
Printer(s)			
Alternative power (IPS/ UPS)			
Pen drive(s)			
Internet connection via modem or mobile phone			
JEEON livelihood content			
Livelihood related video CD			
Photo printer			
Furniture			
Lab setup			
Signboard			
Leaflets/posters			
Centre inauguration			
Electricity bill			
Internet bill			
Repair & maintenance			
Costs of camps, meetings, etc,			

Equipment, activities and services for a CLC setup	Desired equipment for the computer lab	Planned source of funding	How long will it take to obtain the equipment?
Newspapers & advertisements			
Registration fee for helpline service			
Digital camera			

6.10. Any other information that you wish to share?

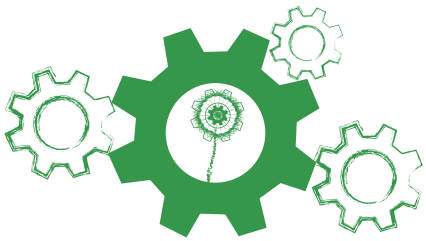
_____

Name of the applicant: **Signature:**

Date: _____/_____/_____ _____

Name of the headmaster: **Signature:**

Date: _____/_____/_____ _____



D.NET'S MONITORING CHECKLIST FOR THE COMPUTER LITERACY PROGRAMME

Monitoring & review of Computer Literacy Programme

Note:

List of abbreviations:

CLC	Computer Literacy Centre
CLP	Computer Literacy Programme
D.Net	Development Research Network
VAB-NJ	Volunteers Association for Bangladesh, New Jersey
SMC	School Management Committee

Instructions: This checklist tool is designed to monitor and review the Computer Literacy Centre (CLP) that is sponsored by the Volunteers Association for Bangladesh, New Jersey (VAB-NJ) and implemented by the Development Research Network (D.Net) through the selected Computer Literacy Centre (CLC) schools. There are three sections in this form & must be completed by interviewers in direct discussion with students, a CLC computer teacher, headmaster and the School Management Committee (SMC) members at the CLC. The names, addresses and mobile number of the participants must be collected by the interviewers.

All questions that address requirements contain the citation for the source of the requirement (related to CLP guideline & agreement). If the requirement is not met, the field researcher/ interviewer must make a finding of non-compliance. All other questions (questions that do not contain the citation for the requirement) do not address requirements, but are included to assist the monitor/reviewer in understanding the present condition of CLP more fully and/ or to identify issues that, if not properly addressed, could result in deficient performance.

Name of CLC school:

Address: _____

_____

Phone: _____ Email address (if any): _____

CLC starting date: _____ Number of batches completed: _____

Comparative data for evaluate gender issues:

Number of students enrolled		Number of students graduated		Dropout rate		Reasons for dropping out	
Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys

Date of the last monitoring & review (if any):

Monitoring & review period: From _____ **To** _____

Name(s) of reviewer(s): _____

Date: _____/_____/_____

Section One: Questions for students

1. How would you rate the following facilities and services?

	Excellent	Good	Fair	Poor
Accommodation of the CLC				
Administrative services (by school)				
Computer teacher's skills & ability to make you understand				
Headmaster's cooperation				
CLP course				
Condition of computer				
Students of both genders getting the same facilities				
Teacher's attitude is equal towards both genders				

2. What additional computer skills and knowledge do you need?

_____

3. What are your feelings about the time given for the CLP course & per class?

a. More than enough ☐ b. Just right ☐ c. Not enough ☐

4. What were the writing/drawing computer skills of the student according to the course? (Should be examined by interviewer)

a. Very satisfactory ☐ b. Satisfactory ☐ c. Poor ☐

5. Any other comments?

_____

Section Two: Questions for the computer teacher

1. How would you rate the following facilities and services?

	Excellent	Good	Fair	Poor
Accommodation of the CLC				
Administrative services (by school)				
Administrative services (by D.Net)				
Headmaster's cooperation				
Condition of computer				
Response from students				
Quality of present CLP curriculum				
Girl students participants at CLP training				
Girl students' attitude towards computer				

2. Hardware problems and solutions

2.1 If hardware problems occurred, how were they solved?

a. Solved by D.Net ☐ b. Solved on my own ☐

2.2 Did you receive a quick response from D.Net?

a. Yes ☐ b. No ☐

2.3 Did you receive the service within the promised time-frame?

a. Yes ☐ b. No ☐

2.4 Was the initiative effective in solving the problems?

a. Yes ☐ b. No ☐

2.5 Were there any problems?

a. Yes ☐ b. No ☐

If yes, please specify:

_____

3. What is your feeling about the time given for the following tasks?

	Not enough	Just right	More than enough
Total time for CLP course (42 hours)			
Duration per class			

Comments (if needed):

_____

4. Did you face any other problems (in CLC to run CLP well)?

a. Yes ☐ b. No ☐

If yes, please indicate & explain:

_____

5. Would you recommend this course to other people?

a. Yes ☐ b. No ☐

Please explain why:

_____

6. Do you feel that you understand the role of the CLC?

a. Yes ☐ b. No ☐

If yes, please rate the need for this role:

a. High ☐ b. Medium ☐ c. Low ☐

7. Did this CLC contribute to the achievement of CLP objectives?

a. More than enough ☐ b. Just right ☐ c. Not enough ☐

8. What is the dropout ratio between girl and boy students?

_____

9. Did you take any initiative to overcome student dropouts?

a. Yes ☐ b. No ☐

If yes, please specify:

_____

10. Any other observations about running CLP properly? Please specify

_____

Section Three: Questions for the headmaster/SMC members

1. Do you feel that students who have CLP certificates are skilled in computer use according to the CLP computer course?

a. Yes ☐ b. No ☐

If yes, please specify the rate:

a. High ☐ b. Medium ☐ c. Low ☐

2. What is your opinion of the ability of the computer teacher to make students understand the course?

a. Very satisfactory ☐ b. Satisfactory ☐ c. Not satisfactory ☐

3. Has this CLC generated any tangible economic/social benefits for underprivileged students?

a. Yes ☐ b. No ☐

If yes, please explain the nature of these benefits and estimate the scale:

_____

4. To what extent have the CLP's objectives been achieved?

a. Fully ☐ b. Partially ☐ c. Not at all ☐

If the CLP's objectives have NOT been fully achieved, please explain reasons behind this and provide any recommendations for how such problems may be avoided in the future:

_____

5. How would you rate the inputs provided by D.Net?

a. Very useful ☐ b. Useful ☐ c. Not useful ☐

6. Do you think CLP is running effectively?

a. Yes ☐ b. No ☐

Please explain why:

_____

7. Any other comments?

_____

THANK YOU!!

PIONEERS IN GENDER EVALUATION IN THE ICT FOR DEVELOPMENT SECTOR

We are committed and experienced gender evaluation practitioners who provide monitoring, evaluation and planning services to organisations to ensure that their efforts are impacting favourably on the lives of girls and women in their communities. We have a strong focus on building capacity in integrating gender and development in ICT-related or ICT-enabled initiatives in developing countries.

We are gender evaluation specialists within the Association for Progressive Communications (APC)—the world's oldest online network working for social change and gender equality. We created the Gender Evaluation Methodology for Internet and ICTs (GEM) which has been used by hundreds of development initiatives around the world since 2002.

We are a multicultural and multilingual team and have built our reputation on:

- Integrating gender into project planning
- Mentoring and capacity-building in gender evaluation
- Effective collaboration with government agencies
- Supporting organisational change and network building
- Evaluation of information and communication and technology projects particularly ICT for development.

We have extensive experience, expertise and established presence in developing countries in Africa, Eastern Europe, Latin America and in parts of Asia, particularly South Asia, Southeast Asia and East Asia.

The evaluation of gender dimensions is an important part of project design because achieving gender equality contributes to development effectiveness and social change. We help our clients understand the gender issues at stake in their projects and contexts so that they are able to develop plans that can respond to the different needs of women as well as men.

What we offer our clients:

- Facilitated self-evaluation and external evaluation
- Gender-sensitive project design and planning
- Quality assessments
- Gender Evaluation Methodology training
- Gender sensitisation training
- Digital storytelling training for evaluation.

For more information on our products and services and fees, please contact: gemsolutions@apcwomen.org or visit www.genderevaluation.net/gemsolutions

Information and communications technologies for development (ICTD) projects can bring about economic, social and political empowerment in rural settings by providing rural communities with the tools and opportunities to develop according to their needs. However, without a gender perspective in the design and implementation of such projects, unequal power relations can be exacerbated.

What can happen when rural ICTD projects apply the Association for Progressive Communication's (APC) *Gender Evaluation Methodology for Internet and ICTs* (GEM)? What kind of change can be brought about when such projects are examined through the gender lens?

The *Gender Evaluation for Rural ICT for Development* guide reflects on these questions and on the lessons learned by GEM practitioners using the wide range of gender evaluation experiences in their work with rural ICTD projects.

Use this guide to obtain ideas of what is possible within existing resource constraints, to identify workable solutions to existing challenges in rural ICTD projects and to promote a "learning for change" culture within your project or organisation.

This is a complementary guide to the GEM manual which was developed by APC within the APC's women's programme after we began investigating the impact of our work in 2000. We asked... What changes are empowering women? How are these changes being measured? What role do ICTs play in these changes? How do these changes shift gender relations between women and men?

20 APC

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